

Independent Pricing and Regulatory Tribunal

Review of Capital Expenditure, Asset
Management and Operating Expenditure for
Gosford City Council and Wyong Shire Council

Final Review Report - Gosford

27 February 2006

The logo for Halcrow, featuring the word "Halcrow" in a bold, blue, italicized sans-serif font. The letter "H" is stylized with a diagonal stroke.

McLennan Magasanik Associates Pty Ltd

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1 Introduction

1.1 *General*

Halcrow was engaged by the Independent Pricing and Regulatory Tribunal (IPART) to undertake an independent review of the proposed capital expenditure, asset management and operating expenditure for Gosford City Council (Gosford Council or Council) and Wyong Shire Council (Wyong Council) Water Agencies in order to set prices for regulated services for the period from 1 July 2006 to 30 June 2009 (“the price path period”). This report details the results of the review completed for Gosford City Council.

The Tribunal had previously set prices for Gosford Council and Wyong Council for the period from 1 July 2005 to 30 June 2006 (“the 2004/05 review”) (IPART, 2005a) based on a detailed review of capital expenditure, asset management and operating expenditure conducted by the Tribunal’s consultant (Atkins/Cardno, 2005).

The 2004/05 review was originally designed to set prices for Gosford Council and Wyong Council for the period from 1 July 2005 to 30 June 2009. However, at the time of the review there was considerable uncertainty in both Councils’ predictions of future capital and operating expenditure. This was a result of circumstances such as an ongoing drought and the investigation of strategies to manage a growing water supply/demand imbalance over the whole Central Coast region.

The Tribunal decided, on the basis of the uncertainties in the Councils’ submissions, to limit their price determination to a one year period only from 1 July 2005 to 30 June 2006. During this one year period, the Councils would have time to complete the strategy investigations underway at the time of the 2004/05 review and be given an opportunity to revise their pricing submissions on the basis of the results of the investigations.

The Tribunal is conducting the current review (“the 2005/06 review”) in order to align the Councils’ price paths with those of the other three regulated agencies - Sydney Water Corporation, Sydney Catchment Authority and Hunter Water Corporation, that is, the four year period from 1 July 2005 to 30 June 2009. The current review will consider only that information which has significantly changed from the 2004/05 review for Gosford Council and Wyong Council.

1.2

Scope

The key objectives of the review are to assess:

- the prudence of operating expenditure for the 2005/06 financial year;
- the efficiency of any changes since the 2004/05 review to Council's estimates of operating expenditure for the period from 1 July 2006 to 30 June 2009 (the price path period);
- the prudence of capital expenditure for the 2005/06 financial year;
- the efficiency of any changes since the 2004/05 review to Council's estimates of capital expenditure for the period from 1 July 2006 to 30 June 2009 (the price path period); and
- the asset management system(s) being implemented by Council and proposed expenditure on further development of the asset management system(s).

IPART has also identified some specific issues that it will address during the current review including:

- Future water supply augmentation – water restrictions have been in force on the Central Coast since February 2002 and in recent months the volume of water in storage has continued a downward trend. Information provided by Gosford Council and Wyong Council indicates that lower than average rainfall is resulting in a short term supply/demand imbalance, however, IPART identified that there is also a longer term imbalance due to current extraction methods combined with ongoing population growth. The Councils are investigating alternative water supply augmentation options such as groundwater abstraction, transfer of bulk water from the Hunter Water Corporation, and construction of a desalination plant. These options are all likely to have a significant effect on the prices set by the Tribunal.
- Water demand forecasting – the demand forecasts for the 2004/05 review incorporated water restrictions into the pricing assessment when this is not usual practice for the Tribunal, however, there were special circumstances for their inclusion. The Tribunal wishes to revisit the demand forecasts in light of any significant changes to the special circumstances that were in place for the 2004/05 review.
- Long Run Marginal Cost (LRMC) – the Tribunal wishes to investigate the option of determining a LRMC of supply in the Central Coast region given the potential availability of sufficient information for the calculation. This calculation represents a change in the method for determining prices and will obviously have an effect on the prices set.

- Funding arrangements for stormwater services – the Tribunal indicated in the 2004/05 review that it was not yet able to establish a clear relationship between revenue raised by stormwater drainage levies imposed by the Councils and associated stormwater drainage expenditure. The Tribunal wishes to set separate, cost reflective stormwater drainage charges in a similar manner to the prices set for water and wastewater services. This change will have a significant effect on the review of stormwater charges and the prices set.

1.3

Review Process

The review process for Gosford City Council has involved the following steps:

- *Inception meeting with IPART and Council.*
The Halcrow/MMA team met with representatives from IPART and Council to discuss the scope of the project and the proposed timetable for each stage.
- *Presentation by Council.*
Representatives from Council gave a short presentation providing some background to the current review and highlighting some of the major changes between their submissions for the 2004/05 review and the current review.
- *Preparation of Issues Report.*
Halcrow/MMA prepared an Issues Report that gave a summary of the major items that would be investigated in the current review. The items were identified after discussions with IPART and Council and reviews of Council's submission for the current review.
- *Preparation of Council Information Request.*
Halcrow/MMA prepared a Council Information Request that gave more specific details on the information that would be required from Council in order to undertake the current review.
- *Detailed Interviews with Council.*
The Halcrow/MMA team held detailed interviews with key Council staff to discuss the major changes in their submissions. Some additional information was requested during the interviews and this information was provided.
- *Preparation of Review Report.*
Council's submission for the current review was then examined in detail in the context of the key objectives of the review and was compared to the submission provided for the 2004/05 review. The results of this detailed investigation, and the previous stages of the review, were collated and

presented in a Draft Review Report. The findings as presented in the Draft Review Report were then discussed with both IPART and Gosford Council and, where appropriate, additional information assessed before presenting the final results of the investigation and Halcrow/MMA's recommendations in this Final Review Report.

2 Identification of Major Issues

2.1 *General*

This section outlines the issues we believe are the key changes between Council's previous and current submissions. This list of key changes has been derived from our detailed interviews with Gosford Council and from discussions with IPART.

The scope of the project, as detailed in **Section 1.2**, required that only the significant changes between the current submission and the previous 2004/05 submission be reviewed. IPART advised that the materiality of the change is the best method for determining if the change should be reviewed in detail. IPART also set a materiality threshold whereby if the change in the capital or operating expenditure for any single item/project exceeded \$40,000, then the item/project was to be considered in the current review.

A number of the major issues/projects considered in this review are identified as joint water supply (JWS) projects. This means that these projects are managed through the Gosford and Wyong Council's Water Authority (GWCWA). The costs for these projects, and hence the proposed expenditure, is shared between the two Councils in accordance with the Gosford/Wyong Councils' Water Authority Agreement 2000, "the GWCWA Agreement". In most cases the capital costs are shared equally between the two Councils while the operating costs are shared on the basis of a defined formula that takes into account the proportional water use.

2.2 *JWS Desalination Project*

The previous submission included significant expenditure for the investigation of desalination options to supplement the water supply for Gosford and Wyong. Capital expenditure was forecast over the previous price control period with the costs for the scheme estimated at \$50 million shared between the two Councils.

Gosford Council's current submission allows for a total of approximately \$350,000 in capital expenditure over 2005/06 and 2006/07, matched by an equal amount from Wyong Council. Discussions at the inception meeting with Council indicated that the planning approval for this project now resides with the Department of Planning as the project has been deemed to be of 'state significance'. Council has advised that the forecast expenditure on this project relates to pre-construction work only, as required to bring the project to a state where consent to proceed has been given and construction can be commenced at short notice.

2.3

JWS Hunter Water Corporation Connection Project

In the previous submission, Council allowed a capital expenditure of \$250,000 in 2004/05 for works required to facilitate the transfer of water from the Hunter Water Corporation system. This allowance was matched by Wyong Council.

At the time of the previous submission, there was a degree of uncertainty associated with the project in respect to both its feasibility and the amount of water that would be available for transfer. There was, at the time, pressure on the Hunter system with declining storage levels and restrictions proposed to be introduced. The Councils and Hunter Water Corporation recognised the need to undertake additional investigations to ensure that the desired transfer capacity of 20ML/day was feasible.

The current submission allows for a major increase in the forecast capital expenditure with a total of almost \$9 million (with a matching contribution from Wyong Council) forecast by Gosford Council in 2005/06 and 2006/07. The increase is due to the proposed upsizing of the supply capacity to approximately 20ML/day. The results of studies underway at the time of the last review are also now available to guide the allocation of capital expenditure.

2.4

JWS Groundwater Extraction Project

The previous submission included significant expenditure for the development of groundwater supplies. Gosford Council allowed a total of approximately \$4 million in capital expenditure over the period 2004/05 to 2006/07 while Wyong Council allowed \$700,000 in expenditure in 2004/05.

The current submission includes a major increase in this expenditure. Gosford Council has 'fast tracked' and expanded its groundwater investigation program and have allowed over \$12 million (with an equivalent contribution from Wyong Council) over the period 2005/06 to 2007/08. Over 90% of the expenditure is programmed to occur in the first two financial years. For both Councils the actual total expenditure to date is over \$8.5 million.

2.5

Water Sharing Plans

The impact of water sharing plans is not obvious in the Council's expenditure submission, however, we note that Council addressed the issue of water sharing plans in their written submission for the 2004/05 review.

2.6 *Stormwater Charges*

In the previous reviews, stormwater charges have generally not been considered in a separate pricing structure. For Gosford Council, the general council operates and maintains the stormwater system rather than the water business. There is a drainage levy charged per property and a transfer of funds from the water business to general council each year. These funds are intended to provide for maintenance of the existing system and construction of new drainage works. Council did not include any capital or operating expenditure in their 2004/05 AIR/SIR submission to IPART.

For the current submission, Council has provided details of capital and operating expenditure for the past and current financial years as well as details of their expenditure forecasts. Council has also signalled its intention to increase the levy charged for drainage services and remove the transfer of funds to general council. Council has proposed that the existing levy be used to pay for operating expenditure while the increase in the levy will go towards servicing loans for capital works.

2.7 *Trade Waste Charges*

During the 2004/05 review, IPART set prices for trade waste charges for one year. Gosford Council had previously indicated they would undertake a major overhaul of the trade waste charging system and that they were proposing to introduce policies similar to the one in place at Sydney Water. The original timeframe for implementation was for Council to introduce their system in 2005/06 and it appears that this timeframe is still valid.

2.8 *Other Items*

Gosford Council has indicated that they have made changes to a number of other items in their submission (in addition to those listed above). The changes relate to variations in costs that are a result of CPI, salary changes, or revised or more accurate cost estimates for projects.

A list of items included in Gosford Council's submission that satisfy IPART's materiality threshold (other than the major items considered above) has been provided by the Council and is summarised in **Table 2-1**. Full details of the projects are included in **Appendix A**.

**Table 2-1 Capital Expenditure Items for Gosford Council Exceeding IPART
 Materiality Threshold over the period 2005/06 to 2008/09**

EXPENDITURE (\$'000 2005/06)	2004 Submission	2005 Submission	Difference
WATER SUPPLY PROJECTS			
JWS Lower Wyong Transfer System Upgrade	2,758	2,900	142
JWS Mooney Mooney Transfer System Upgrade	2,073	645	-1,428
JWS Mardi Dam Raising	1,841	1,622	-219
JWS Mardi High Lift Pump Station and Associated Works	4,043	8,825	4,782
JWS Mardi Dam Transfer System	4,267	9,500	5,233
JWS Mardi to Mangrove Transfer System	1,545	500	-1,045
JWS Project Management for Major Projects	0	1,637	1,637
Asset Management System	283	475	192
GIS Backlog Data Capture	0	150	150
Unallocated Projects	4,577	2,618	-1,959
SEWERAGE PROJECTS			
KSTP-Renew Belt Press Facility	1,030	900	-130
Gosford CBD Upgrade	824	1,174	350
Gosford CBD Sewer DSP	0	1,079	1,079
Asset Management System	283	475	192
GIS Backlog Data Capture	0	150	150
Unallocated Projects	10,037	9,745	-292

Note: Costs provided for joint water supply projects (JWS) are shared between Gosford and Wyong Councils. (Sources – Wyong Council email dated 6 January 2006 and Gosford Council email dated 15 December 2005).

3 Capital Expenditure

3.1 *General*

This section outlines the major capital expenditure items for Gosford Council that have been reviewed in detail including the major items identified in **Section 2** and those items identified as exceeding the materiality threshold set by IPART (refer **Sections 2.1** and **2.8**). The structure of this section is as follows:

- a brief overview of the information requirements for each item is provided;
- this is followed, in each case, by a comparison of the expenditure included in the 2004/05 review submissions to the expenditure proposed in the current review; and
- finally, a short discussion on the justification for the expenditure and our comments and recommendations is presented.

A decision on whether the proposed capital expenditure is considered prudent or appropriate requires a consideration of whether the expenditure is both necessary and cost effective, that is:

- firstly, that the expenditure is required to maintain the quality, quantity and reliability of the water, wastewater and drainage services provided by Gosford Council; and
- secondly, that the expenditure is a cost effective method of achieving these goals.

All cost values included in this section are, unless otherwise indicated, expressed as real values for the 2005/06 financial year.

3.2 *JWS Drought Contingency Projects*

A number of the water supply headworks projects being undertaken jointly by Gosford Council and Wyong Council under the direction of the GWCWA have been identified as drought contingency projects. These projects were initially identified for investigation and assessment in respect to their feasibility for augmenting the supply of water during the current period of ongoing drought.

The projects identified for investigation included the following:

- Construction of a desalination plant.
- Groundwater extraction.
- Transfer of water from the Hunter Water Corporation water supply system.

Council has indicated that, investigation results available at the time of the 2004/2005 submission were not conclusive, and that subsequent investigations have provided some better definition in respect to the development priorities assigned to each of these options. The uncertainty at the time of the previous submission contributed, in part, to IPART's decision to make a one year price determination at that time.

Council has now advised that whilst investigation and development of all three projects is still progressing, development of the groundwater extraction and Hunter Water Corporation connection projects are more advanced. As outlined in **Section 2.2**, the desalination project is currently progressing through the planning approval process and will not proceed further unless consent to proceed is given and water harvested from other sources is found to be inadequate to address the supply/demand imbalance.

At the time of preparing the current submission, it was anticipated that the groundwater extraction and Hunter Water Corporation connection projects would provide sufficient additional yield to address the imbalance, however, this is yet to be confirmed.

3.3

JWS Desalination Project

3.3.1

Information Requirements

The interviews focused on whether the forecast expenditure in the current submission was prudent and considered whether the project is still a priority, whether the consideration of the project as 'state significant' has any bearing on the forecast expenditure, and whether the timeframe for the project requires adjustment. Specifically the information requested included the following:

- Latest planning/strategy reports on the project.
- Details of feasibility assessment that prioritises the development of alternative water sources.
- Details of the involvement of both Council and the Department of Planning in the planning approval process.
- Details of proposed expenditure over the price path period.
- Detailed justification of proposed expenditure, that is, correlation of expenditure with proposed investigations/strategy studies.
- Details of the expected program for the project.

3.3.2

Expenditure Comparison

Table 3-1 below shows the adjustment in the proposed expenditure between the 2004/05 review and the current review.

Table 3-1 Expenditure Comparison for Gosford Council's 2004/05 to 2005/06 Submissions - Desalination Project

Expenditure (2005/06 \$'000s)	Actual	Forecast				
		2004/2005	2005/2006	2006/2007	2007/2008	2008/2009
2004/2005 Review (\$'000 2004/05)	750	7,500	11,750	5,000	0	24,250
Adjusted 2004/2005 Review	773	7,725	12,103	5,150	0	24,978
2005/2006 Review	7	250	100	0	0	350
Difference	-766	-7,475	-12,003	-5,150	0	24,628

Note: All figures are (2005/06 \$'000s) values except 2004/05 Review figures, which are included as (2004/05 \$'000s) values for reference purposes only.

Escalation rate of 3% applied has been applied to original 2004/05 Review figures to provide Adjusted 2004/05 Review figures in (2005/06 \$'000s) values.

3.3.3

Comments/Recommendations

There is a significant change in the proposed capital expenditure for this project from the 2004/05 review to the 2005/06 review with Gosford Council's proposed expenditure over the price path period decreasing from just under \$25 million to \$0.35 million. Council has advised that the primary reasons for the change are the outcomes of the investigations undertaken since the 2004/05 submission and the need to refer the project to the Department of Planning for planning approval as the project has been designated a project of 'state significance'.

The GWCWA has determined that development approval for the project will still be sought from the Department of Planning and, if provided, a decision will then be made as to whether the project is still required. The Councils have reiterated their desire to progress the pre-construction aspects of the project, however, they have stated that the project would only proceed in the event of the current drought continuing and water storage levels continuing to decline.

Given this continuing uncertainty over the project, the Gosford Council have decided not to include the costs for construction and operation of the desalination project in their 2005/06 submission. This decision has been recorded in several documents supplied by Gosford Council including:

- Gosford-Wyong Councils' Water Authority Technical Advisory Group - Summary Advice *'Contingency Supply Contributions – Groundwater, Hunter Connection and Desalination'* (undated report supplied by Wyong Council).

- Gosford-Wyong Councils' Water Authority Technical Advisory Group - Summary Advice *WaterPlan 2050 – Long Term Water Supply Strategy* (report dated 16 November 2005 supplied by Wyong Council).

The decision is also consistent with the outcomes of the 2004/05 review which recommended that the proposed capital expenditure included in Council's submission be deferred as "the need for, the scope and timing of a desalination plant is not conclusive" (Atkins/Cardno, 2005).

There was, however, some capital expenditure amounting to just over \$7,200 incurred by Gosford Council in 2004/05. As this project is a joint water supply project, it is appropriate to note that Wyong Council included actual expenditure of over \$1.76 million on this project for 2004/05. This is slightly unusual as the costs for joint water supply projects would generally be shared equally between the two Councils in accordance with the GWCWA Agreement.

Wyong Council (who are leading this JWS project) have provided information in response to the draft report indicating that, while the actual expenditure for some of the joint water supply projects may differ between the Councils, this difference is reconciled at regular periods with the balancing funds transferred between the Councils as required to maintain the equal cost sharing agreement. These changes are reflected in the Council's revenue rather than the capital expenditure records.

There is also proposed capital expenditure of \$350,000 over the price path period, as outlined in **Table 3-1** above. This is matched in Wyong Council's submission by another \$350,000 of proposed expenditure. The Councils' submissions indicate that this has been set to cover on-going pre-construction activities to get the project to a stage where construction can commence upon approval from the Department of Planning and the GWCWA Board.

Wyong Council has provided further information in response to the draft report advising that the expenditure will essentially bring the desalination project to the stage of legal commencement whereby the Councils retain the right to go ahead with the works without necessarily commencing construction work immediately. This would allow the Councils to keep the project as an alternative water supply source should it be needed if water storage levels continue to decline, however, it should be noted that a lead time of 18 months to 2 years is required to construct the proposed desalination facility.

We are of the same view as the recommendations of the 2004/05 review that the removal of the construction and operating costs for the desalination plant is prudent given the referral to the Department of Planning for planning approval

and the uncertainty over whether the project will still be required as a drought contingency response.

With respect to the proposed capital expenditure of \$350,000 over the review period, we were originally of the view that this expenditure is not considered prudent or appropriate at this stage. We believed that the desalination project, as described above, is no longer the preferred drought response/contingency option and by the Council's own reports the medium term shortfall between supply and demand could have been met from other more cost effective sources such as the Wyong-Mardi scheme and the Mangrove to Mardi transfer system.

However, further information supplied by the Councils in response to the draft report indicated that the decline in water storages had continued with no recovery from some recent short periods of rainfall. Council further clarified that the actual pumping rates from the groundwater extraction bores were about half the expected yields. This new information, combined with clarification that other potential water supply sources (the Mardi/Mangrove transfer system projects) are reliant on run-of-river flows, has led us to revise our recommendation in respect to the desalination project.

We are now of the view that the additional expenditure required to enable the desalination project to be brought to a stage of legal commencement is appropriate given the current circumstances faced by Council.

Recommendations

In our view, the desalination project is still not our preferred response to the current water supply/demand imbalance and this is consistent with the views expressed in the 2004/05 review (WS Atkins, 2005), the various Council Technical Advisory Group and Board reports, and the Councils' submissions for the current review.

We agree that the capital cost of the project should be deferred, however, we recommend that the remaining expenditure on the project should be allowed as proposed in the Council's submission for the reasons outlined above.

Expenditure (2005/06 \$'000s)	2005/2006	2006/2007	2007/2008	2008/2009
Desalination	250	100	0	0

3.4 *JWS Hunter Water Corporation Connection Project*

3.4.1 *Information Requirements*

The interviews took into account the comments made in the previous consultants report as to whether the project is deemed to be required given increased supply from groundwater sources and the scope for further demand management measures to limit the increases in demand. The report on the investigation of the connection was also reviewed to determine the justification for the project. The forecast operating expenditure is based on a current water cost of \$0.94/kL for 2005/2006 and up to 31 December 2006, a revised cost of \$0.79/kL from 1 January 2007 and rising to \$0.80/kL in 2007/08 and \$0.82/kL in 2008/2009). The interviews assessed the basis of these pricing assumptions and whether any formal agreements have been made with Hunter Water Corporation.

Specifically the information requested included the following:

- Latest planning/strategy reports in respect to the project, especially covering the potential sources of water.
- Details of proposed expenditure over the price path period.
- Details of any agreements with Hunter Water Corporation regarding the price and volume of water to be supplied, responsibility for capital expenditure on the connection and responsibilities for ongoing operation and maintenance of the connection.

3.4.2 *Expenditure Comparison*

Table 3-2 below shows the adjustment in the proposed expenditure between the 2004/05 review and the current review.

Table 3-2 Expenditure Comparison for Gosford Council's 2004/05 to 2005/06 Submissions - Hunter Water Connection Project

Expenditure (2005/06 \$'000s)	Actual	Forecast				
		2005/2006	2006/2007	2007/2008	2008/2009	Total Forecast
Submission	2004/2005					
2004/2005 Review (2004/05 \$'000s)	250	0	0	0	0	0
Adjusted 2004/2005 Review	258	0	0	0	0	0
2005/2006 Review	0	5,159	3,826	0	0	8,985
Difference	-258	5,159	3,826	0	0	8,985

Note: All figures are (2005/06 \$'000s) values except original 2004/05 Review figures, which are included as (2004/05 \$'000s) values for reference purposes only.

Escalation rate of 3% applied has been applied to original 2004/05 Review figures to provide Adjusted 2004/05 Review figures in (2005/06 \$'000s) values.

3.4.3

Comments/Recommendations

There is a significant change in Gosford Council's proposed capital expenditure for this project from the 2004/05 review to the 2005/06 review, with no expenditure included in the 2004/05 review submission to a total capital expenditure of just under \$9 million in the 2005/06 submission. Council has advised that the 2004/05 submission included some expenditure in 2004/05 for obtaining up to 6 ML/day whereas the 2005/06 submission has included significant expenditure in order to obtain the desired transfer capacity of 20 ML/day.

There has been no recorded expenditure to date on this project by Gosford Council with the works being undertaken by Wyong Council who incurred actual expenditure of over \$0.9 million in 2004/05. This again is slightly unusual given that we would expect the capital costs to be shared equally as per the GWCWA Agreement. Wyong Council (who are managing this JWS project) have, however, provided additional information indicating that although the actual expenditure differs between the Councils, this difference is reconciled at regular periods to reflect the Council's equal cost sharing agreement.

The forecast expenditure over the price path period covers Gosford Council's cost contribution to the design and construction of the major transfer system.

We have received and reviewed a number of documents in respect to this project that have quantified the proposed costs and timeframes for the various stages in the project including:

- Gosford-Wyong Councils' Water Authority Technical Advisory Group - Summary Advice '*Contingency Supply Contributions – Groundwater, Hunter Connection and Desalination*' (undated report supplied by Wyong Council).
- Gosford-Wyong Councils' Water Authority Technical Advisory Group - Summary Advice '*WaterPlan 2050 – Long Term Water Supply Strategy*' (report dated 16 November 2005 supplied by Wyong Council).
- Gosford-Wyong Councils' Water Authority Technical Advisory Group - Summary Advice '*Progress Report on Capital Improvement Works*' (undated report supplied by Wyong Council).
- Memorandum of Understanding Relating to Bulk Water Transfer Scheme (agreement dated 22 November 2005 between Hunter Water Corporation, Wyong Shire Council and Gosford City Council - supplied by Wyong Council).

Additionally, the Department of Commerce has undertaken a review of water supply options, including the Hunter Water connection in the preparation of the WaterPlan 2050 document. We have also reviewed the recommendations from the

2004/05 review as a comparison between the recommended capital expenditure and Council's submission to the current review.

Gosford Council has included a proposed capital expenditure of just under \$9 million which, combined with Wyong Council's equivalent proposed expenditure of just under \$9 million, leads to a total proposed capital expenditure for this project of just over \$17.9 million. This is consistent with the figures that are reported in the documents listed above, but is slightly less than the figure provided by Wyong Council, after the detailed interviews, of \$18.1 million (Wyong Council email dated 6 January 2006).

The amounts allowed also differ from those included in the recommendations of the 2004/05 review where it was suggested that a total capital expenditure of approximately \$15 million should be allowed. This figure was thought to be "an appropriate level of cost, shared between Gosford Council and Wyong Council, to fund a link scheme with Hunter Water Corporation in the price control period" (Atkins/Cardno, 2005).

Gosford Council have indicated that a project team has been set up at Wyong Council, who are responsible for managing this JWS project.

The Memorandum of Understanding between the Councils and Hunter Water Corporation provides additional details on the joint Councils' contributions:

- | | |
|--|------------------------|
| • Teralba Pump Station upgrade | \$ 0.70 million |
| • Rathmines water main upgrade | \$ 0.53 million |
| • Wangi water main upgrade | \$ 5.28 million |
| • Morisset pump station and water main to Kiar Reservoir | \$11.46 million |
| • Total Contribution | \$17.97 million |

The costs shown above are shared equally between Gosford Council and Wyong Council. In general discussions, both Gosford Council and Wyong Council have indicated that the proposed capital expenditure forecasts were developed from a combination of staff knowledge and experience, previous contracts, external consultants' reports, and actual tender submissions.

Wyong Council provided additional information on the breakdown of costs for the proposed expenditure and a monthly expenditure projection for the works. Of concern to us is that the information provided indicated that it is likely the proposed expenditure listed above will increase. Council did not provide any further details on any potential expenditure increases and, as such, we have not considered this further.

In reviewing whether the proposed capital expenditure is both necessary and appropriate, we acknowledge the following circumstances:

- The drought currently being experienced over the Central Coast area has been described as the worst drought on record and storage levels are at alarmingly low levels.
- The Councils' normal water supplies are predominantly reliant on run of river flows which are significantly affected by drought.
- The characteristics of the joint water supply catchments are such that only a significant period of sustained wet weather is likely to have a dramatic impact on storage levels.
- The development process for the drought contingency projects has been fast-tracked due to the urgency of the conditions.
- The Councils have developed a cost sharing arrangement with Hunter Water Corporation to assist in the development of the project.

We also understand that there is future potential to transfer water back to the Hunter system, if storage levels permit, thereby providing further options for the longer term balance of water resources on the Central Coast.

We agree with the recommendations of the 2004/05 review and subsequent Council investigations that indicate:

- This project is a prudent option to address the water supply shortages of the current drought.
- This project is a conventional option, is able to be implemented in less time than other options such as the desalination option and has a lower on-going operational cost (and cost of water) than other options.

On this basis we agree that the proposed capital expenditure in the Councils' submissions be allowed.

Recommendations

In our view, the Hunter Water connection project is considered necessary as a short term response to the continuing drought and the proposed capital expenditure is appropriate. The project will provide short term benefits as well as the longer term balance of water resources on the Central Coast.

We recommend that the proposed capital expenditure in Council's submission remain unchanged as follows:

Expenditure (2005/06 \$'000s)	2005/2006	2006/2007	2007/2008	2008/2009
Hunter Connection	5,159	3,826	0	0

3.5 *JWS Groundwater Extraction Project*

3.5.1 *Information Requirements*

The interviews considered whether the forecast expenditure on groundwater supplies is prudent and efficient given the current situation with the drought in the area, the available alternative supplies, and the projected increases in supply to be obtained. Specifically the information requested included the following:

- Latest planning/strategy studies on the project.
- Details of and justification for the forecast expenditure on exploration for future resources and the exploitation of current resources.
- Details for the justification of exploration areas and reconciliation of expenditure against achieved outcomes, that is, water yields identified or developed.
- Details of any cost benchmarking done to review the expenditure proposed, that is, against other similar groundwater exploration programs or against the estimates listed in the consultant reports.

3.5.2 *Expenditure Comparison*

Table 3-3 below shows the adjustment in the proposed expenditure between the 2004/05 review and the current review.

Table 3-3 Expenditure Comparison for Gosford Council's 2004/05 to 2005/06 Submissions - Groundwater Project

Expenditure (2005/06 \$'000s)	Actual	Forecast				
		2005/2006	2006/2007	2007/2008	2008/2009	Total Forecast
Submission	2004/2005					
2004/2005 Review (2004/05 \$'000s)	1,000	1,500	1,500	0	0	3,000
Adjusted 2004/2005 Review	1,030	1,545	1,545	0	0	3,090
2005/2006 Review	5,086	6,500	4,350	1,000	0	11,850
Difference	4,056	4,955	2,805	1,000	0	8,760

Note: All figures are (2005/06 \$'000s) values except original 2004/05 Review figures, which are included as (2004/05 \$'000s) values for reference purposes only.

Escalation rate of 3% applied has been applied to original 2004/05 Review figures to provide Adjusted 2004/05 Review figures in (2005/06 \$'000s) values.

3.5.3

Comments/Recommendations

There is a significant change in the proposed capital expenditure for this project from the 2004/05 review to the 2005/06 review with a significant ramp-up of costs over each of the years in the review period. The total proposed expenditure rose from a previous value of just over \$3.0 million to its current figure of just over \$11.8 million. Gosford Council has advised that the reasons for this expenditure change are that the previous estimates were only preliminary due to the need to fast-track the project. Council also advises that the Department of Natural Resources has placed additional works/requirements on Council related to environmental impact assessment and monitoring and groundwater yield studies.

Gosford Council recorded an actual expenditure of almost \$5.1 million in 2004/05 while Wyong Council included actual expenditure of over \$3.5 million in their submission for the same period. This is again slightly unusual given that we would expect that capital costs would be shared equally as per the GWCWA Agreement. Gosford Council (who are managing this JWS project) have, however, provided additional information indicating that, although the actual expenditure differs between the Councils, this difference is reconciled at regular periods to reflect the Councils' equal cost sharing agreement.

The forecast expenditure of \$11.8 million would cover Gosford Council's contribution to the implementation of the groundwater scheme. Wyong Council's contribution to the scheme is also just over \$11.8 million reflecting the equal cost sharing agreement in place.

There are a number of documents related to this project that have been supplied by the Councils including:

- Gosford-Wyong Councils' Water Authority Technical Advisory Group - Summary Advice '*Contingency Supply Contributions – Groundwater, Hunter Connection and Desalination*' (undated report supplied by Wyong Council).
- Gosford-Wyong Councils' Water Authority Technical Advisory Group - Summary Advice '*WaterPlan 2050 – Long Term Water Supply Strategy*' (report dated 16 November 2005 supplied by Wyong Council).
- Gosford-Wyong Councils' Water Authority Technical Advisory Group - Summary Advice '*Progress Report on Capital Improvement Works*' (undated report supplied by Wyong Council).
- Gosford-Wyong Councils' Water Authority Technical Advisory Group - Summary Advice '*Contingency Plan – Use of Groundwater*' (undated report supplied by Wyong Council).

Additionally, the Department of Commerce has undertaken a review of water supply options, including this groundwater option in the preparation of the WaterPlan 2050 document. We have also reviewed the recommendations from the 2004/05 review as a comparison between the recommended capital expenditure and Council's submission to the current review.

The combined proposed capital expenditure for this project is over \$23.7 million not including the combined actual expenditure in 2004/05 of over \$8.6 million. The *'Contingency Plan – Use of Groundwater'* document supplied by Wyong Council provides a relatively recent project budget cost of just over \$23 million and an "estimated strategic final budget cost range" of \$26.8 to \$33.8 million.

The document also indicates that there have been some additional requirements placed on the project by the Department of Natural Resources that have resulted in much higher costs than expected. There is a lack of existing information on groundwater resources in the area that will allow the Department to make an assessment of sustainable yields. Consequently, the groundwater investigation program is also being used as a data collection process. The Councils have been required to undertake the following additional works over a 12 month testing period:

- Installation of groundwater monitoring bores to determine potential yields - approximately 110 investigation bores will be drilled with approximately 2-3 monitoring bores installed for each production bore.
- Engagement of specialist consultants to undertake investigations on the local ecology, surface water quality and quantity assessments, and flora and fauna surveys. Data logging is being undertaken with data submitted regularly to the Department of Natural Resources.

It is also possible that the monitoring requirements from the initial testing period may be extended long term which will then have an effect on operating costs.

Gosford Council have set up a specific project team to manage the project and have also engaged a number of specialist hydrogeologists and other experts to provide advice on the location of investigation bores and the potential yields available.

We are satisfied that the appropriate processes have been followed to fast track this project and that the proposed capital expenditure is both necessary and appropriate. The recommendations of the 2004/05 review also supported the implementation of the project. We recognise that there are external factors imposing on the project that are having a major impact on the actual costs and the proposed expenditure.

Gosford Council provided an update on the project subsequent to issue of the draft report indicating that the yields obtained from the newly installed groundwater bores are much lower than expected. As a result, the expected total yield from groundwater has been halved. The costs for the project have not changed, however, and this has meant that the unit price of the water has jumped significantly and, while still lower than the desalination option, is now higher than the water supplied from the Hunter Water Connection.

Recommendations

In our view the groundwater projects are considered necessary as a short term response to the continuing drought and the proposed capital expenditure is appropriate. The project has the shortest lag time to provide water supply to the system and also has relatively low capital and operating costs for the volume of water supplied.

We recommend that the proposed capital expenditure in the Council's submission be accepted as follows:

Expenditure (2005/06 \$'000s)	2005/2006	2006/2007	2007/2008	2008/2009
Groundwater	6,500	4,350	1,000	0

3.6

Water Sharing Plans

3.6.1

Information Requirements

The interviews considered whether the impacts of proposed water sharing plans have been adequately covered in the planning for future water yields. The proposed implementation timing for the plans, relevant to Council, was also reviewed. Specifically the information requested included the following:

- Studies/investigations into the impact of the water sharing plans on Council's available water resources.
- Project program for implementation of plans.

3.6.2

Comments/Recommendations

The issue of water sharing plans and their potential impact on Gosford Council was discussed during the detailed interviews. Additional information on the proposed impacts of the plans was also provided within other documents supplied by both Gosford Council and Wyong Council, including the Gosford-Wyong Councils' Water Authority Technical Advisory Group – Summary Advice 'Water Plan 2050 – Long Term Water Supply Strategy' (report dated 16 November 2005 supplied by Wyong Council).

The impact of the water sharing plans will generally be to reduce the two Councils' access to low flows in the rivers and creeks that are used as water sources. A Water Sharing Plan is in place for Ourimbah Creek and a draft plan covering the Wyong River, Mangrove Creek and Mooney Mooney Creek has been released for comment.

The Councils and the Department of Natural Resources are working together on the draft plan to ensure that, while the objectives of the plans are met, the security of the water supply system is not compromised.

The long term impact of the water sharing plans on Council's water supplies is expected to be fairly significant with the initial draft plans potentially resulting in a 30% reduction in yields. The impact of the plans on capital expenditure within the review period is likely to be minor, however, Council has indicated that the impacts will need to be factored into their long term capital works.

We are satisfied that the impact of the water sharing plans on the current price path period is minimal and the future impact of yield reductions will be taken into account by Gosford Council in preparing its capital works strategies.

3.7

Stormwater Charges

3.7.1

Information Requirements

The interviews considered, in detail, the transfer of responsibility of the stormwater system from the general council business to the water and wastewater business group. Details of the ownership of assets, responsibilities for capital and operating expenditure, and corporate costs allocated to stormwater were considered during the interviews. Specifically the information requested included the following:

- Details of the transfer of previous capital and operating expenditure and one-off payments to the current and proposed capital and operating expenditure for stormwater.
- Details of impacts of the State Government's new \$25/property drainage levy on proposed expenditure.
- Details of Memorandum of Understanding or other service agreements detailing various responsibilities for stormwater system assets and expenditure.

3.7.2

Expenditure Comparison

Stormwater has not, until this current review, been considered as a separate item for capital expenditure. In previous submissions, Gosford Council made a general transfer of around \$3.0 million from the water and sewer funds to general Council

funds, which along with revenue collected from the drainage levy, paid for stormwater capital works. The arrangements for the general transfer, however, did not allow IPART to ensure that the funds were actually used for the purpose of capital expenditure on stormwater works. As a result, in all previous price path periods, this transfer of funds has not been included in the allowed capital expenditure.

In 2004, Gosford Council resolved to separate out stormwater capital expenditure and consider it in the same manner as for water and wastewater works. This separation is now seen in Council's submission for this current review.

Table 3-4 below shows the total proposed capital expenditure for stormwater works in the forthcoming price path period.

Table 3-4 Proposed Expenditure for Gosford Council's Stormwater Works in 2005/2006 to 2008/2009

Expenditure (2005/06 \$'000s)	Actual	Forecast				
Submission	2004/2005	2005/2006	2006/2007	2007/2008	2008/2009	Total Forecast
Unallocated	0	0	0	0	0	0
Pipelines/Canals (flood mitigation/foreshore)	671	510	800	750	500	3,665
Drains (open/closed/culvert/other)	1,760	2,764	2,806	2,626	2,854	13,652
Office Equipment	0	0	0	0	0	0
Buildings	0	0	0	0	0	0
Vehicles	0	0	0	0	0	0
Land	0	0	0	0	0	0
Total	2,431	3,274	3,606	3,376	3,354	17,317

3.7.3

Comments/Recommendations

Gosford Council has provided a number of reports and spreadsheets relating to stormwater works. These include:

- Council's AIR/SIR submission 2005/2006 dated 8 November 2005.
- AIR Preparation Stormwater 2004CapEx Stormwater spreadsheet dated 8 December 2005 (supplied by Gosford Council in package dated 16 December 2005).
- Table of responsibilities for stormwater studies, modelling, funding, operations and maintenance and asset management – spreadsheet titled

'2005 flooding & drainage responsibilities table' and dated 28 November 2005 (supplied by Gosford Council in email dated 16 December 2005).

- List of catchment flood studies undertaken by external consultants – set of four untitled and undated spreadsheets (supplied by Gosford Council in email dated 16 December 2005).
- Drainage area risk ranking sheets providing risk rankings for each identified drainage catchment – collection of proforma ranking sheets for each catchment (supplied by Gosford Council in email dated 16 December 2005).

The information provided by Council provides a good indication of the detailed process that it follows when developing and listing stormwater projects in the capital works program.

We are satisfied that the proposed stormwater capital expenditure is both necessary and appropriate. Council have provided detailed information identifying the backlog of drainage works that ranges from an estimated value of around \$170 million to an unsubstantiated figure of around \$300 million. Council have also provided details on the well established system of identifying and prioritising drainage works. The information provided also indicates that the majority of studies that provide the basis for capital expenditure requirements are undertaken by external specialist consultants.

Council's proposed expenditure on stormwater projects is also reasonably consistent with the actual expenditure as reported by Council in additional information provided (dated 8 December 2005) which indicates an average actual expenditure of around \$3.4 million over the last two financial years.

The main focus of this review of stormwater expenditure, and the primary issue of why the previous expenditure was disallowed, is to determine whether the process is transparent, that is, whether the revenue collected for the purpose of stormwater works is actually spent on, and can be traced to, the actual stormwater works.

Gosford Council has provided details of proposed revenue options in its submission for the current review. Council has proposed an increasing drainage levy that, although initially will not fully fund both capital and operating expenditure, will be step-increased each financial year to ultimately fund the expenditure required. In doing this and in creating an additional price review item for stormwater, we believe that the Council has succeeded in making the issue of stormwater expenditure transparent.

Recommendations

In our view, Gosford Council has taken the steps required to make the funding of stormwater works transparent. These steps have included:

- a separate pricing item has been included for stormwater capital expenditure;
- the general transfer of funds has ceased and the drainage levy has been revised and set with a view to providing full funding for capital and operating expenditure; and
- the ownership of stormwater assets have been transferred to the water and sewerage business and a regulatory asset base value has been determined.

There is a well established process for identifying stormwater works including:

- engaging specialist external consultants to prepare studies and determine initial capital expenditure requirements;
- risk ranking and prioritisation of catchments and projects; and
- further development of capital expenditure requirements and subsequent inclusion of the project in the proposed stormwater expenditure forecasts.

Council have also advised that there is a significant backlog of works that will require a long period to reduce.

It is our view, therefore, that the proposed capital expenditure is both necessary and appropriate and that the following capital expenditure should be allowed.

Expenditure (2005/06 \$'000s)	2005/2006	2006/2007	2007/2008	2008/2009
Stormwater	3,274	3,606	3,376	3,354

3.8

Trade Waste Charges

3.8.1

Information Requirements

The interviews considered the implementation of the trade waste pricing system and whether the trade waste pricing has become, or is likely to become, a major cost driver in the future. The cost of implementation was investigated and on-going system operation costs were identified. Specifically, the information requested included the following:

- Internal reports on the implementation of the trade waste pricing system, the proposed prices, and details of the cost of implementing the system and on-going operational costs.
- Details of how the costs identified have been included in the expenditure submissions.

3.8.2

Comments/Recommendations

Gosford Council have advised in their submission to the current review that their trade waste system was updated and implemented just prior to the 2004/05 submission. The revised system is based on the Department of Energy, Utilities and Sustainability (DEUS) Trade Waste Model Policy and Best Practice Pricing. They have further advised that in general they wish to maintain the current charges, in real terms, over the price path period in line with the DEUS guidelines.

Council has advised that IPART's determinations in respect to pricing are being phased in to minimise the impacts of the changes. They have stated that the implementation of the system is aimed at the protection of the wastewater system rather than as a revenue raising tool. Gosford Council have stated that the trade waste system is not a major cost driver and is unlikely to become a major driver in the future.

3.9

Other Items

3.9.1

Overview

IPART has set a materiality threshold to identify those capital and operating expenditure items that require specific review. Gosford Council has provided a list of items that meet this criteria, as outlined in **Table 3-5**. The list does not include the major items that have already been discussed in the section above.

The list of items provided by Council also includes a brief explanation as to the reason for the change, as shown in **Table 3-5**. Our comments and recommendations in respect to the proposed changes are outlined in the following **Sections 3.9.2** and **3.9.3**.

Table 3-6 provides additional detail on the unallocated items listed in **Table 3-5**. This information indicates that Council has responded to the comments made by Atkins/Cardno in the 2004/05 review in allocating expenditure to specific types of works. Atkins/Cardno commented that new expenditure should not be allowed if it cannot be allocated to specific works and outputs and we would agree with this comment. It is noted that Council has not included any proposed capital expenditure under the previous headings of "Projected New Works Unallocated" and "Projected Replacements Unallocated".

The development of the new asset management system will assist in allocating costs to specific works and it is likely that further refinement of the allocation of expenditure will occur when the system is operational.

Table 3-5 Differences in Other Items - Gosford Council - 2005/06 to 2008/09

Capital Expenditure over period 2005/06 to 2008/09 (2005/06 \$'000s)	2004/05 Submission	2005/06 Submission	Difference in Expenditure	Explanation for Difference
WATER SUPPLY PROJECTS				
JWS Lower Wyong Transfer System Upgrade	2,758	2,900	142	Refinement of estimate derived from the Options Report. Delay in commencing project due to uncertainty associated with water entitlements under proposed water sharing plans.
JWS Mooney Mooney Transfer System Upgrade	2,073	645	-1,428	Refinement of estimate derived in the options report. The significantly reduced estimate has arisen as a result of an opportunity to reuse existing infrastructure ie. transfer mains.
JWS Mardi Dam Raising	1,841	1,622	-219	Refinement of estimate derived in the feasibility study. Delay in commencing project.
JWS Mardi High Lift Pump Station and Associated Works	4,043	8,825	4,782	Inclusion of additional works associated with the MHLPS, including: a) Mardi clear water tank (15ML) and associated pipework; b) Tuggerah 3 reservoir (40ML); c) North Gosford trunk main extension; d) North Gosford to Springfield pump station & rising main. Delay in project.
JWS Mardi Dam Transfer System	4,267	9,500	5,233	Projected Expenditure in 2005 Submission (\$19.5M) is based on tender prices that were higher than estimated in the consultant's concept report. The 2005 Submission also includes an additional item for upgrade of power supply (\$2M) to Mardi area for Mardi Dam Transfer system and Mardi High Lift Pump Station
JWS Mardi to Mangrove Transfer System	1,545	500	-1,045	Investigation works brought forward to 2005/2006 due to continuing drought.
JWS Project Management for Major Projects	0	1,637	1,637	This is a new item introduced in the 2005 Submission to externally project manage JWS works.
Asset Management System	283	475	192	Revised cost of Water & Sewer component of new AM system including data transfers from many data bases
GIS Backlog Data Capture	0	150	150	Capturing of backlog data now that the corporate GIS is at a functional level for Water & Sewer
Unallocated Projects	4,555	0	-4,555	Breakdown of costs to projects and revision of estimates. See detail of unallocated items in Table 3-6 .
SEWERAGE PROJECTS				
KSTP-Renew Belt Press Facility	1,030	900	-130	Revised estimate
Gosford CBD Upgrade	824	1,174	350	Detailed DSP prepared resulting in more accurate description of works and corresponding estimates
Gosford CBD Sewer DSP	0	1,079	1,079	Detailed DSP prepared resulting in more accurate description of works and corresponding estimates
Asset Management System	283	475	192	Revised cost of Water & Sewer component of new AM system including data transfers from many data bases
GIS Backlog Data Capture	0	150	150	Capturing of backlog data now that the corporate GIS is at a functional level for Water & Sewer
Unallocated Projects	9,989	0	-9,989	Breakdown of costs to projects and revision of estimates. See detail of unallocated items in Table 3-6 .
North Avoca Sewerage Scheme	5,945,000	18,000,000	12,055,000	The scope of the project has changed significantly and is being re-investigated. (Project was included in 2004/05 submission as a number of individual projects)

Note: Costs provided for joint water supply projects (JWS) are shared between Gosford and Wyong Councils. (Sources – Wyong Council email dated 6 January 2006 and Gosford Council email dated 15 December 2005 except JWS Project Management for Major Projects – see comments below).

Table 3-6 Detail of Proposed Unallocated Items for Gosford Council over 2005/06 to 2008/09

WATER SUPPLY PROJECTS (2005/06 \$'000s)	2007/2008	2008/2009
New Works (2004 Submission)	452	459
Replacements (2004 Submission)	1,801	1,857
Total (2004 Submission)	2,253	2,316
Water main renewals/replacements	674	782
Water trunk mains	164	164
Water reservoirs	64	64
Water reservoirs (roof, ladders, inlet, painting)	598	612
Water treatment civil	22	22
Water pump stations major (Civil Gosford)	5	5
Water pump stations major (Mech/Elec Gosford)	145	120
Asset Management System	50	50
Gosford CBD reticulation upgrade	0	0
Water connections / New Connections	0	50
JWS Mangrove Ck Dam – upgrade fire trails	50	50
JWS Dubbo Gully Plan of Management - Implement	15	15
Total (2005 Submission)	1,787	1,934
Difference (2004 to 2005)	-466	-382
SEWERAGE PROJECTS	2007/2008	2008/2009
New Works	2,731	5,254
Replacements	685	1,313
Total (2004 Submission)	3,416	6,567
SPS & reticulation upgrades (EPA Requirement)	450	450
Minor SPS replacements (Mech/Elec)	802	2,333
Minor SPS replacements (Civil)	93	93
Major SPS replacements (Mech/Elec)	427	387
Major SPS replacements (Civil)	17	17
Odour control – sewer	50	50
Unallocated KSTP/WWSTP Mech/Elec	1,331	1,642
Sewerage treatment plant upgrade	0	731
Sewer gravity mains	0	653
Asset management	50	50
Priority sewer program	118	0
Total (2005 Submission)	3,338	6,406
Difference (2004 to 2005)	-78	-161

Note: Costs provided for joint water supply projects (JWS) are shared between Gosford and Wyong Councils. Item “Water Connections” and “Unallocated KSTP/WWSTP Mech/Elec” not found in AIR/SIR. (Source – Gosford Council email dated 15 December 2005).

3.9.2

Water Projects

- ***JWS Lower Wyong Transfer System Upgrade*** – the proposed expenditure for this project has increased from \$2.6 million to \$2.9 million over the review period (matched by equivalent expenditure from Wyong Council). The reason given by Council for this increase is that there has been a revision to the estimate and a project delay reflecting uncertainty over the impact of water sharing plans.

The total expenditure required for the project, however, has changed from just over \$2.76 million to just over \$2.9 million, a difference of \$130,000 only. This difference is less than 5% of the total expenditure and is, in our opinion, an acceptable revision to the estimate. We are satisfied that this change is acceptable and the proposed expenditure should be allowed.

It is further noted that, whilst the water sharing plans have not yet been finalised, draft plans indicate that upgrade of the transfer system would be prudent. The proposed expenditure profile is consistent with the timeframe for final approval of the water sharing plans.

Recommendation

We recommend that the proposed expenditure for the Lower Wyong Transfer System Upgrade be accepted as detailed below:

Expenditure (2005/06 \$'000s)	2005/2006	2006/2007	2007/2008	2008/2009
JWS Lower Wyong Transfer System	150	2,062	688	0

- ***JWS Mooney Mooney Transfer System Upgrade*** – the proposed capital expenditure for this project has decreased from \$1.9 million to just under \$0.65 million (with a matching contribution from Wyong Council). Council have advised that the reduction is the result of revisions to the estimate and the use of existing infrastructure in place of new works.

This issue was raised in the 2004/05 review by Atkins/Cardno and a revised total capital expenditure of \$1.3 million was recommended. Gosford Council's proposed expenditure (plus the matching contribution from Wyong Council) is similar to Atkins/Cardno's recommended figure.

This project, along with the other listed Wyong-Mardi projects, is an important medium term response to the water supply and demand imbalance experienced by Gosford and Wyong Councils.

Recommendation

We recommend that the proposed expenditure for the Mooney Mooney Transfer System Upgrade be accepted as detailed below:

Expenditure (2005/06 \$'000s)	2005/2006	2006/2007	2007/2008	2008/2009
JWS Mooney Mooney Transfer System	50	0	0	595

- JWS Mardi Dam Raising*** – the proposed capital expenditure for this item has decreased from \$1.7 million to just over \$1.6 million, with an equivalent reduction in Wyong Council’s expenditure. Council has advised that there has been a delay in commencing the proposed works, which has resulted in some expenditure not being included in the review period.

A review of the AIR/SIR has indicated that the total expenditure for the project has decreased from \$1.79 million to just over \$1.62 million, a difference of about \$170,000.

The reductions in the proposed capital expenditure are appropriate and are fairly minor. We recommend accepting the proposed reductions.

Recommendation

We recommend that the proposed expenditure for the Mardi Dam raising project be accepted as detailed below:

Expenditure (2005/06 \$'000s)	2005/2006	2006/2007	2007/2008	2008/2009
JWS Mardi Dam Raising	500	1,000	122	0

- JWS Mardi High Lift Pump Station and Associated Works*** – the proposed capital expenditure for this project has increased from just over \$4.0 million to over \$8.8 million over the review period (with an equivalent increase in Wyong Council’s proposed expenditure). The explanation provided by Council was that some additional works had been added to the project including reservoirs and tanks, trunk main extensions and a pump station and rising main.

While we would understand that these works are the reason for the significantly increased capital expenditure, we would question the reasons for adding these new works. Comments in the 2004/05 review indicated that the previous detailed estimates forecast a total capital expenditure requirement of only \$8.0 million (shared between the two Councils). We

would question why these new works were not identified at the time of the previous detailed estimates.

Wyong Council, who are managing this joint water supply project, provided additional information in response to the draft report. That information provided some detail of the proposed additional works and the estimated capital expenditure required for each project.

The additional information provided indicates that the projects are of high importance and that the consequences of not proceeding include:

- Wyong distribution system reservoir capacity falling below design standards.
- Gosford distribution system reservoir capacity falling below design standards.
- Wyong peak demands exceeding the balancing storage capacity of Tuggerah No 2 Reservoir.
- Use of all reserve storage to meet combined peak demands with none available for contingency.

Our concern is, with the apparent critical importance of these projects, why they were not included in the 2004/05 submission. We can conclude that either Council has undertaken some major investigation work to identify these new works in the short period between the preparation of the two submissions or that Council failed to allow for the projects in the 2004/05 submission. We cannot find any reference to these projects in any of the previous AIR/SIR submissions. Either option highlights that there could be some serious issues with Council's planning process.

We also note that the information provided indicates that the previous estimates for expenditure were based on a consultant's report completed in the early 1990s, and were only recently revised to develop the new estimates. It is understandable that the estimates are likely to significantly change given the long period between reviews, however, we believe that this process is not good practice. A more rigorous approach would be to review estimates at least at the start of every price review period and, preferably, on an annual basis. This process would at least lessen the impact of increases in the estimated capital expenditure.

We have serious concerns about Council's planning process in failing to identify these additional works prior to the current review and we have continuing reservations about the justification for the additional works and as such we propose to make some adjustments to the capital expenditure.

We believe that the expenditure for the Mardi High Lift Pump Station is appropriate and recommend that this expenditure be allowed with the

revised estimate included in the additional information provided by Wyong Council. However, we believe that the additional works are not entirely justified at this stage and propose that the expenditure for these projects be deferred. We note that Council's information indicates that the proposed additional works would increase the system capacity to meet future demands out to the year 2031. We suggest that based on this timeframe, there is quite some scope for deferral of the additional works.

We also note that Council is experiencing a serious drought at present, and consequently, works that allow additional water to be pumped into the system may not be fully utilised for some time or at least until the current drought is over. Current predictions are that the water supply system is likely to be on serious restrictions for a large proportion of the review period.

We have provided individual explanations for each of the additional works to further explain our recommendations.

- *Mardi Clearwater Tank No. 2 (15ML) and associated pipework* – we believe that this additional clearwater tank is not required at this stage. We believe that with the variable pumping capacity available at the new Mardi High Lift Pump Station (40 ML/day, 80ML/day, 120ML/day and 160ML/day with the three duty pumps alone) that the output of the pump station can be set to match the Mardi WTP, essentially only using the existing clearwater tank as a balancing storage. This arrangement can be utilised since the pump station is only pumping to another service reservoir and not directly into the distribution system.
- *Tuggerah No 3 Reservoir (40ML)* – we believe that this reservoir's capacity is unlikely to be a critical need at this stage. We believe that there is sufficient output from the Mardi High Lift Pump Station and the Mardi WTP to match the required demands during the current drought period. We have assumed that the peak day demands for the Kanwal and The Entrance systems are less than the output of the pump station and WTP of 160ML/day.
- *Wyong-Gosford Transfer – North Gosford Trunk Main Extension* – the information provided by Wyong Council indicates that this extension is only needed for emergency supply purposes and that the current and projected peak day demands can be met through the existing system. We suggest that these works should be considered a lower priority and deferred out of the review period.

- *North Gosford to Springfield Pump Station and Rising Main* – while the intention of this project is sound and represents a cost saving over the previously considered option, we note that these works are essentially an additional security of supply project. The existing systems are sufficient to meet the current and projected peak day demands.

Recommendation

We propose that the capital expenditure for the JWS Mardi High Lift Pump Station and Associated Works be adjusted to allow the expenditure for the pump station but to defer the proposed expenditure for the additional works. We have, however, provided a nominal allowance for ongoing planning work associated with the proposed additional works.

We recommend that the following capital expenditure be accepted:

Expenditure (2005/06 \$'000s)	2005/2006	2006/2007	2007/2008	2008/2009
JWS Mardi High Lift Pump Station and Associated Works	500	5,500	100	100

- ***JWS Mardi Dam Transfer System*** – the proposed capital expenditure for this project has increased from over \$4.1 million to just over \$9.5 million in the review period (with a similar increase from Wyong Council). Council advised that the revised figure is from significantly higher tender prices than were estimated in the latest reports. In addition, some additional works have also been included in the project.

The 2004/05 review commented that the estimate of expenditure was not in line with the detailed estimates in reports on the project and recommended that the expenditure be reduced by about 15%, commenting that the reduction was “related to better project definition at the design stage” (Atkins/Cardno, 2005).

We also note that a major proportion of the expenditure proposed in the 2004/05 review was originally scheduled for the 2004/05 year. Our review of the total costs of the project indicate that in the 2004/05 review the total cost included was about \$6.4 million with over \$2.1 million scheduled for 2004/05. The total proposed expenditure for the project has therefore changed from \$6.4 million to \$9.5 million, a difference of \$3.1 million. Our review also revealed that there has been some significant variation in the proposed project timeframe and expenditure, as shown in **Table 3-7**.

Table 3-7 Variations in Proposed Expenditure by Gosford Council for Mardi Dam Transfer System - 1999/2000 Review to 2005/2006 Review

Historical Proposed Expenditure for Mardi Dam Transfer System (2005/06 \$'000s)	2002/03	2003/04	2004/05	2005/06	2006/07	Totals
1999/2000 review	\$4,776				0	\$4,776
2002/2003 review		\$2,652	\$5,150			\$7,802
2004/2005 review			\$2,125	\$3,237	\$1,031	\$6,393
2005/2006 review				\$2,000	\$7,500	\$9,500

Wyong Council, who are managing this joint water supply project, provided additional information in response to the draft report which indicated that the additional works relate to upgrades to power supply requirements across the whole Mardi area. The proposed total cost for the power supply upgrades is estimated at \$2 million. The required upgrades were identified in a meeting between Wyong Council and Energy Australia in May 2005.

We have not been informed of the specific cost allocated to this project and we note that the total power supply upgrade cost also relates to four other projects. If, however, we distribute the estimated \$2 million total cost equally between all five projects, we would assume that the specific cost to each project will be approximately \$0.4 million. This cost is then shared equally between Gosford Council and Wyong Council, so accounting for these additional works, the unexplained difference in the proposed expenditure for Gosford Council is now \$2.9 million.

For the capital expenditure, we would expect that the detailed estimates for the works should be within 15% of the actual contract costs. If we also assume a premium of 15-20% on the contract rates to account for increased construction activity, we would then expect that the contract costs would be no more than 30-35% higher than the detailed estimates. Council's proposed capital expenditure in the review period is over 130% higher than the corresponding period in the 2004/05 review, or more than 120% higher if we remove the capital expenditure for the additional works. This increase is, in our opinion, unacceptable.

If we take into account the slippage in the project timeframe and look at the total expenditure for the project, the difference reduces to about 42%, which is, however, still outside our expectation of 30-35% as discussed above. We are concerned about the continuing slippage in the project timeframe and expenditure and the remaining variation in the capital

expenditure, and consequently we propose to recommend a maximum allowable capital expenditure limit of 30% of the original detailed estimate.

Our proposed capital expenditure limit, based on the original total capital expenditure of \$6.4 million, is then \$8.52 million, plus the \$0.2 million allowance for the additional power supply works. We have applied this expenditure over the price path period in the same proportion as included by Council in their submission.

Recommendation

We propose to make an adjustment to the capital expenditure for the JWS Mardi Dam Transfer System based on our assessment of the project. We recommend that the total capital expenditure allowed for Gosford Council should be \$8.72 million and that it should be applied over the review period in the same proportions as Council’s 2005/06 submission, as detailed below:

Expenditure (2005/06 \$'000s)	2005/2006	2006/2007	2007/2008	2008/2009
JWS Mardi Dam Transfer System	1,794	6,926	0	0

- ***JWS Mardi to Mangrove Transfer System*** – the proposed capital expenditure for this project has decreased from \$1.5 million to just over \$0.5 million. The explanation provided by Council was that investigation works had been brought forward in response to the continuing drought.

While this initially seems unusual, a review of Council’s AIR/SIR indicates that some expenditure has been brought forward, however, the timing for the project has slipped and the majority of the capital expenditure is now outside the review period.

The total proposed expenditure for the project has not changed and as such we are happy to accept the proposed reduction.

Recommendation

We recommend that the proposed capital expenditure for the Mardi to Mangrove Transfer System be accepted as detailed below:

Expenditure (2005/06 \$'000s)	2005/2006	2006/2007	2007/2008	2008/2009
JWS Mardi to Mangrove Transfer System	200	300	0	0

- **JWS Project Management for Major Water Projects** – the proposed capital expenditure for this new item and is just over \$1.6 million (with an equivalent expenditure from Wyong Council). This new expenditure is a positive response to both the recommendations made in the 2004/05 review and the significant increase in the works program due to the drought contingency response.

There are some slight discrepancies between the Gosford Council and Wyong Council submissions for this item as shown in **Table 3-8**.

Table 3-8 Discrepancies between Gosford Council and Wyong Council Submissions for JWS Project Management

	2005/2006	2006/2007	2007/2008	2008/2009	Total
Gosford AIR/SIR	425	618	407	187	1,637
Wyong AIR/SIR	435	617.6	406.4	186.6	1,645.6
Wyong email 6 January 2006	435	633	427	201	1,696

The information supplied by Wyong Council (email dated 6 January 2006) was based on nominal figures and had not been adjusted to 2005/06 \$ equivalent values. The primary difference between the Gosford Council and Wyong Council AIR/SIR figures is the expenditure allowance in 2005/06. We have taken the figures supplied in each Council's AIR/SIR submissions as the correct figures.

The proposed expenditure on project management is essential given the large increase in the capital works program Council is proposing over the review period and the historical differences between Council's proposed and actual expenditure.

Overall the project management expenditure represents about 3.6% of the total proposed capital expenditure for the joint water supply works over the price path. This overall figure is reasonably consistent with normal estimates of project management costs being about 2.5% of the capital costs. However, there are some variations when considering the proposed year-by-year expenditure as shown in **Table 3-9**.

Table 3-9 JWS Project Management Expenditure Profile as Proposed by Gosford Council

Expenditure (2005/06 \$'000s)	2005/2006	2006/2007	2007/2008	2008/2009
JWS total capital expenditure	15,309	25,383	3,890	595
JWS Project Management	425	618	407	187
PM as % of capital expenditure	2.8%	2.4%	10.5%	31.4%

While we support the overall project management expenditure as appropriate, we propose to re-phase the timing of the expenditure to more accurately reflect the level of capital works in each year. We note that the proposed expenditure for project management will not, at present, include management of the desalination project if this is required in the review period. It is recommended that the project management component for the desalination plant, if needed, be included in the revised capital expenditure for that project.

Recommendation

We recommend that the proposed capital expenditure for Project Management of Major Projects be allowed but the timing be adjusted as detailed below:

Expenditure (2005/06 \$'000s)	2005/2006	2006/2007	2007/2008	2008/2009
JWS Project Management	558	915	142	22

- ***Asset Management System (Water)*** – the proposed expenditure for this item is reported as increasing from \$275,000 to \$375,000. Council advises that the reason for this change is a revised estimate of the cost of the system and the inclusion of additional works required for the capture of data into the system once it is operational.

A review of Council’s AIR/SIR indicates that the proposed expenditure for the Asset Management System item totals \$475,000. The review also indicates that an amount of \$100,000 has been moved from the provision for unallocated projects to the Asset Management System item, thereby explaining the additional expenditure proposed.

The development of the Asset Management System is reviewed in **Section 5** of this report. The implementation of the system is an important step for Council in assisting the capture and reporting of asset information. The requested increase in capital expenditure is also relatively low and it is our opinion that the amount is appropriate.

Recommendation

We recommend that the proposed capital expenditure related to the Asset Management System be allowed as detailed below:

Expenditure (2005/06 \$'000s)	2005/2006	2006/2007	2007/2008	2008/2009
Asset Management System (Water)	275	100	50	50

- GIS Backlog Data Capture (Water)*** – the capital expenditure for this project is a new item in the 2005/06 submission and is a direct result of the implementation of the Asset Management System. Council advises that the proposed expenditure of \$150,000 will result in the capture of previously held GIS data into the new Asset Management System.

The capture of data into the new Asset Management System is essential to the use of the system as a fully functioning management tool. We believe that this expenditure is appropriate and will lead to better reporting and management of Council’s assets.

Recommendation

We recommend that the proposed capital expenditure related to the GIS Backlog Data Capture be allowed as detailed below:

Expenditure (2005/06 \$'000s)	2005/2006	2006/2007	2007/2008	2008/2009
GIS Backlog Data Capture (Water)	0	100	50	0

- Unallocated Water Projects*** – the capital expenditure included in the 2004/05 submission under “Unallocated Projects” has now been distributed to a number of water project types and individual items. This action, combined with revisions to the previous expenditure, has resulted in a decrease in the overall expenditure from \$4.1 million to over \$2.6 million (the sum of expenditure for the individual projects/items).

The allocation of capital expenditure to specific project types is Council’s response to recommendations from the 2004/05 review where Atkins/Cardno refused a proportion of the unallocated expenditure because it was not associated with specific projects or cost drivers.

We acknowledge that Council has undertaken this step and that the implementation of the asset management system will assist in further developing this process. We note that there is now no item for unallocated water capital expenditure in the AIR/SIR.

In order to assess the prudence and efficiency of the re-allocated expenditure, reference is made to the information presented in **Table 3-6**. Based on the magnitude of the allocated expenditure, the efficiency of two of the listed items was assessed, as follows:

- *Water Main Renewals/Replacements* – expenditure of \$674,000 and \$782,000 has been allocated in 2007/2008 and 2008/2009 respectively. A brief analysis reveals that these amounts would allow for the replacement of approximately 3,000 metres of reticulation pipework (0.4% of Council’s non-trunk water mains) each year. This expenditure is considered appropriate.
- *Water Reservoirs (Roof, Ladders, Inlet, Painting)* – expenditure of \$598,000 and \$612,000 has been allocated in 2007/2008 and 2008/2009 respectively. A brief analysis reveals that this would allow, on average, expenditure of approximately \$17,600 on each of Council’s 34 water reservoirs each year. This amount is considered suitable for the implementation of an ongoing program of minor works at these facilities.

Recommendation

We recommend that the proposed capital expenditure, now allocated to specific projects, be accepted with further details on how the expenditure has been distributed shown in the Capex Form presented in **Appendix B**.

Expenditure (2005/06 \$'000s)	2005/2006	2006/2007	2007/2008	2008/2009
Unallocated Water Projects	0	0	0	0

3.9.3

Sewerage Projects

- ***KSTP-Renew Belt Press Facility*** – the proposed expenditure for this project has been revised from \$0.97 million to \$0.9 million. The reason provided by Council for the change is that the figure is a revised estimate.

As this figure is being revised lower and is scheduled for the same year as in the previous submission we accept this expenditure change.

Recommendation

We recommend that the proposed expenditure for the KSTP-Renew Belt Press Facility project be accepted as below:

Expenditure (2005/06 \$'000s)	2005/2006	2006/2007	2007/2008	2008/2009
KSTP Renew Belt Press Facility	0	900	0	0

- **Gosford CBD Upgrade** – the proposed expenditure for this project has increased from \$0.8 million to \$1.17 million. Council has advised that the reason for this increase is the completion of a Development Servicing Plan (DSP) which provided additional details on the proposed works and cost estimates.

This project was originally scheduled for completion in 2005/06 but has now been extended out to 2009/2010. The total proposed expenditure for the project has decreased from \$1.3 to \$1.2 million and the total expenditure to date has been just over \$39,000.

The proposed increase in the capital expenditure within the review period is relatively low and, when the overall reduction in the total capital expenditure for the project is taken into account, we believe that this expenditure is appropriate.

Recommendation

We recommend that the proposed expenditure for the Gosford CBD Upgrade item be accepted as below:

Expenditure (2005/06 \$'000s)	2005/2006	2006/2007	2007/2008	2008/2009
Gosford CBD Upgrade	800	121	222	31

- **Gosford CBD Sewer DSP** – this proposed expenditure is a new item for the current submission with the Development Servicing Plan (DSP) having been completed after the 2004/05 review period. A number of works are proposed in the DSP totalling just under \$1.2 million.

Whilst this project appears to be similar to the Gosford CBD Upgrade project, we now understand that the CBD Upgrade project involves the upgrade of existing infrastructure to meet current sewer loading whereas the DSP project involves upgrades and the provision of new infrastructure to accommodate sewage flows generated by new developments.

Our initial assessment in respect to this project was that, in view of its similarity to the CBD Upgrade project, the amount of work proposed under these two items and Council's historical performance in delivering its proposed capital works program, the quantum of the expenditure within the review period was not justified. It was considered that, unless these works are to be deemed a high priority, it would be more appropriate to delay them until the next review period.

Gosford Council, however, provided additional information in response to the draft report, including clarification of the scope of the two projects. This additional information indicates that Council considers this project to

be a high priority and critical to meeting Council's environmental and regulatory obligations in the Gosford CBD area. The defined scope of the proposed works is supported by detailed modelling of the sewerage system and costing of the proposed works.

In view of this additional information, we are satisfied that the proposed works are necessary, are a high priority for meeting environmental and regulatory standards, and are therefore appropriate. We support the proposed expenditure.

Recommendation

We recommend that the proposed expenditure for the Gosford CBD Sewer DSP be accepted with the proposed expenditure as outlined below:

Expenditure (2005/06 \$'000s)	2005/2006	2006/2007	2007/2008	2008/2009
Gosford CBD Sewer DSP	0	344	648	87

- ***Asset Management System (Sewerage)*** – the proposed expenditure for this item is the same as that set aside under the water supply projects, that is, \$475,000 (refer **Section 3.9.2** for further details).

The total capital expenditure set aside for development and implementation of the Asset Management System is therefore \$950,000. This figure is consistent with Council's estimates, which are based on consultants' responses to a call for Expression of Interest, that the project would cost between \$800,000 and \$1,000,000.

The development of the Asset Management System is reviewed in **Section 5** of this report. The implementation of the system is an important step for Council in assisting the capture and reporting of asset information. The requested increase in capital expenditure is also relatively low and it is our opinion that the amount is appropriate.

Recommendation

We recommend that the proposed capital expenditure related to the Asset Management System be allowed as detailed below:

Expenditure (2005/06 \$'000s)	2005/2006	2006/2007	2007/2008	2008/2009
Asset Management System (Sewerage)	275	100	50	50

- **GIS Backlog Data Capture (Sewerage)** – the capital expenditure for this project is a new item in the 2005/06 submission and is a direct result of the implementation of the Asset Management System. Council advises that the proposed expenditure of \$150,000 will result in the capture of previously held GIS data into the new Asset Management System.

The capture of data into the new Asset Management System is essential to the use of the system as a fully functioning management tool. We believe that this expenditure is appropriate and will lead to better reporting and management of Council’s assets.

Recommendation

We recommend that the proposed capital expenditure related to the GIS backlog data capture be allowed as detailed below:

Expenditure (2005/06 \$'000s)	2005/2006	2006/2007	2007/2008	2008/2009
GIS Backlog Data Capture (Sewerage)	0	100	50	0

- **Unallocated Sewer Projects** – the capital expenditure included in the 2004/05 submission under “Unallocated Projects” has now been distributed to a number of sewerage project types and individual items. The proposed expenditure has reduced marginally from \$6.49 million to \$6.4 million with the distribution of expenditure and revisions to expenditure estimates.

The allocation of capital expenditure to specific projects is Council’s response to recommendations from the 2004/05 review where Atkins/Cardno refused a proportion of the unallocated expenditure because it was not associated with specific projects or cost drivers.

We acknowledge that Council has undertaken this step and that the implementation of the asset management system will assist in further developing this process. There is now no unallocated capital expenditure in the AIR/SIR.

In order to assess the prudence and efficiency of the re-allocated expenditure, reference is made to the information presented in **Table 3-6**. Based on the magnitude of the allocated expenditure, the efficiency of two of the listed items was assessed, as follows:

- *Minor SPS Replacements (Mech/Elec)* and *Major SPS Replacements (Mech/Elec)* – expenditure of \$802,000 and \$2,333,000 has been allocated in 2007/2008 and 2008/2009 respectively for Minor SPS Replacements and expenditure of \$427,000 and \$387,000 has been allocated in 2007/2008 and 2008/2009 respectively for Major SPS

Replacements. A brief analysis reveals that if mechanical and electrical equipment at each of Council's 185 sewage pump stations was replaced every 15 years, then on average 12-13 pump stations would need to be upgraded each year. Allowing a nominal amount of \$60,000 (\$30,000 mechanical and \$30,000 electrical) to upgrade each pump station, the annual expenditure would amount to approximately \$750,000. If a further 50% contingency allowance is included for unprogrammed works, the total annual allowance required for the replacement of mechanical and electrical equipment at sewage pump station would be in the order of \$1,200,000. Consequently, it is proposed to reduce the allocation for Minor SPS Replacements in 2008/09 to \$843,000.

- o *Unallocated KSTP/WWSTP Mech/Elec* – expenditure of \$1,331,000 and \$1,642,000 has been allocated in 2007/2008 and 2008/2009 respectively for unidentified mechanical and electrical works at these two sewage treatment plants. The magnitude of these allowances for unidentified works is considered to indicate an absence of adequate planning and is therefore deemed unacceptable. Consequently, a reduced allowance of \$750,000 in each of the two years is proposed.

Recommendation

We recommend that the proposed capital expenditure, now allocated to specific projects, be accepted with the exception of the changes outlined above. Further details on how the expenditure has been distributed is shown in the Capex Form presented in **Appendix B**.

Expenditure (2005/06 \$'000s)	2005/2006	2006/2007	2007/2008	2008/2009
Unallocated Sewerage Projects	0	0	0	0

- ***North Avoca Sewerage Scheme*** – this project was identified by Council after the submission of the current AIR/SIR and its proposed expenditure was not included. Gosford Council have asked that this project be considered in the review and have indicated that they will revise their AIR/SIR to include the project if necessary.

Council have advised that this project is the consolidation of a number of existing projects in the North Avoca region into a single overall project. The decision to consider works required in the whole North Avoca region was made after the 2004/05 review and involved engaging a consultant to undertake a system wide strategy study and to recommend suitable options.

Gosford Council have advised that the proposed North Avoca Sewerage Scheme project is made up of some previously identified works that have been included in previous AIR/SIR submissions and some new works that have been recommended as a result of the strategy study. The existing works and their proposed expenditure are identified in **Table 3-10**.

Table 3-10 North Avoca Sewerage Scheme – Components Listed in Gosford Council’s 2004/05 Submission

Existing Components of the North Avoca Sewerage Scheme	Expenditure included in Council’s 2004/05 submission			
	2005/06	2006/07	2007/08	2008/09
Capex item (All costs 2005/06 \$’000s)				
Terrigal/North Avoca Rising Main	\$1,538	\$ -	\$ -	\$ -
Terrigal/North Avoca Rising Main Stage 2	\$ 718	\$ -	\$ -	\$ -
Nth Avoca Minor Catchments	\$ -	\$ 769	\$ -	\$ -
Nth Avoca Rising Main Stage 3	\$ -	\$ -	\$ 666	\$ -
Nth Avoca Gravity Main	\$ -	\$ -	\$ -	\$ -
Avoca Augmentation A5 & A6	\$ -	\$ -	\$ -	\$ -
Kincumber A/D Line	\$ 308	\$ 410	\$ -	\$ -
Kincumber Pumping Station Rising Main	\$ 513	\$1,025	\$ -	\$ -
YEARLY SUB TOTALS	\$3,075	\$2,204	\$ 666	\$ -
TOTALS	\$5,945			

Council have also advised that they have carried over funds, previously approved by IPART but not yet expended, totalling over \$4.36 million which they plan to use for development of the proposed sewerage scheme.

Council has provided a timeline for the completion of the project showing the stages still required and the proposed expenditure for each year of the review period. The timeline is shown in **Table 3-11**.

We note that the proposed total expenditure of \$18 million is based on estimates developed by an external consultant in a Strategic Options Report. The estimates included a contingency allowance of approximately 15%.

We also note the consultant stated that the estimates should not be used for budgeting purposes and more detailed estimates should be developed from a functional design of the preferred option.

Table 3-11 North Avoca Sewerage Scheme – Proposed Timeline

Year	North Avoca Sewerage Scheme - Project Stages	Proposed expenditure
2005/06	Conduct detailed options review & develop preferred option (current scope) Commence concept/functional design of preferred option	\$200,000
2006/07	Complete concept design Determine procurement strategy & staging requirements Detailed design/documentation of Stages 1 & 2 Tender & award Stages 1 & 2 Commence construction Stages 1 & 2 Commence detailed design/documentation Stages 3 & 4	\$1,700,000
2007/08	Complete construction Stages 1 & 2 Complete design/documentation Stages 3 & 4 Tender & award Stages 3 & 4 Commence construction Stages 3 & 4 Commence detailed design/documentation Stage 5	\$7,500,000
2008/09	Complete construction Stages 3 & 4 Tender & award Stage 5 Complete Stage 5	\$8,600,000
	Total	\$18,000,000

Council has advised, however, that they have reviewed the cost estimates developed in the Strategic Options Report and consider them reasonable to use for budgeting purposes. We have not specifically reviewed the estimates as we do not have the necessary information to do this, however, we note the references used by the consultant in developing the estimates and comment that the costs appear to be based on actual contract costs and previous works managed by the consultant.

We expect that, with a project of this size, there will be numerous opportunities to gain capital efficiencies in both the design and construction phases. Furthermore, the holistic approach now adopted for development of the scheme will result in efficiency gains when compared to the previous “piece meal” approach. Given these opportunities we would be inclined to reduce the allowable expenditure, however, we note the uncertainty in the cost estimates and consequently recommend setting the estimated expenditure of \$18 million as the maximum allowable expenditure.

Recommendation

We recommend that the North Avoca Sewerage Scheme be included in this review and we support the concept of the project. We recommend setting the capital expenditure for this scheme as shown below:

Expenditure (2005/06 \$'000s)	2005/2006	2006/2007	2007/2008	2008/2009
North Avoca Sewerage Scheme	200	1,700	7,500	8,600

3.10

Capital Expenditure for Projects Not Reviewed

The scope of our review has limited our assessment to only those AIR/SIR items that have changed in value greater than IPART's nominated materiality threshold of \$40,000 over the review period. This has meant that there are a large number of projects that have either changed by less than \$40,000 or have not changed at all, which are not included in our total expenditure forecasts.

In addition, we are required to take into account the recommendations made by Atkins/Cardno, IPART's consultant for the 2004/05 review, in the current review. This requirement is made difficult by the difference in the methods used to review expenditure between the 2004/05 review and our current review. Atkins/Cardno reviewed and made adjustments to some individual projects and some general cost drivers whereas we have reviewed and made adjustments on an individual projects basis only.

In preparing the draft report we adopted a method which we believed appropriately accounted for Atkins/Cardno's recommendations in the total capital expenditure. The method generally involved calculating the percentage adjustment Atkins/Cardno's had recommended in the total capital expenditure for water and wastewater, then applying that percentage adjustment to the total value of the projects that we had not reviewed. This adjusted expenditure was then added to the total value of the individual projects we had reviewed to determine the overall total capital expenditure.

We recognised that this method essentially applies a blanket reduction to the capital expenditure, however, at the time it appeared to be the most appropriate method available to us to determine the overall total capital expenditure. We continued to investigate alternative methods of accounting for Atkins/Cardno's recommended adjustments following issue of the draft report and have now identified what we believe to be a more accurate approach.

We have been able to review Atkins/Cardno's recommended adjustments in detail and now believe we can apply these adjustments individually to specific projects. We also believe that we have incorporated the majority of the adjustments in our detailed review of individual projects. We now also propose to apply Atkins/Cardno's efficiency targets separately and have proposed some revised targets as outlined in **Section 3.11**.

Our method of calculating the total capital expenditure is now quite simple. We identify the difference between Council's total proposed expenditure, as reported in the AIR/SIR, and the total value of capital expenditure for the projects we have reviewed. The difference is then added to the total value of capital expenditure we have recommended for the individual projects to show the total capital expenditure for all the water, wastewater, and stormwater projects. This method is also shown in the Capex Form included in **Appendix B**.

3.11

Capital Efficiency Targets

Halcrow Management Sciences, IPART's consultants for the 2002/03 review of Gosford Council, recommended that no capital efficiencies be included in the forecast capital expenditure. The reasons given for this recommendation were related to the state of Council's asset management planning, the short price path period proposed, the fact that capital efficiencies are hard to achieve on projects that have already commenced, and the representations made by Council during the review of the draft report.

IPART's consultants for the 2004/05 review, Atkins/Cardno, proposed a common set of efficiency targets, that increased each year, for water and wastewater expenditure. Atkins/Cardno based their efficiency targets on their review of Council's processes compared with what was best practice at the time throughout Australia and England. The quantitative figures were based on actual process improvements achieved by water agencies in England and Wales over the period 2000 to 2004, and Atkins/Cardno advised that they adopted values equal to half these actual efficiency gains in determining the recommended efficiency targets for Council.

We have not specifically investigated new capital efficiency targets for Gosford Council but have reviewed the targets set by Atkins/Cardno in the context of the current environment faced by Council and the proposed capital expenditure forecasts.

We recognise that Gosford Council is dealing with a record drought at present and that a high proportion of the capital expenditure, at least in 2005/06 and 2006/07, is a result of drought contingency works and also that the majority of these works are already underway. We agree with Halcrow Management Sciences' view that capital efficiencies are hard to achieve for projects that have already commenced.

We therefore propose to introduce similar capital efficiency targets to those recommended by Atkins/Cardno, but with the timing of these targets delayed to recognise the issues highlighted above.

We recommend setting the capital efficiency targets shown below and we have included these targets in our calculation of the allowable capital expenditure:

Capital Efficiency Targets	2005/2006	2006/2007	2007/2008	2008/2009
Water, Wastewater, and Stormwater Efficiency Targets	0	0	2.5%	5%

3.12

Historical Capital Expenditure Review

In previous determinations, IPART has identified the issue of Council's proposed versus actual expenditure as a key factor in the review of prices. IPART's consultants for the previous reviews raised concerns about the ability of Council to deliver their proposed capital works programs and for the current review, IPART has again highlighted this issue as an important consideration.

We have reviewed the difference between Gosford Council's proposed and actual capital expenditure over the period from 2000/01 to 2004/05. The comparison is useful in identifying how Council performs in achieving their capital expenditure forecasts and gives an insight into how Council is likely to perform in future years.

We have identified the expenditure differences in the water, wastewater, stormwater and total capital programs in **Table 3-12**. This information shows there are some significant differences between the proposed and actual expenditure, especially when considering the individual programs (water, wastewater and stormwater).

The data in **Table 3-12** is also presented graphically in **Figure 3-1**. We have suggested a band of $\pm 20\%$ as a target range for difference between proposed and actual expenditure.

Figure 3-1 shows that, in general, the difference between Council's total proposed and total actual expenditure is outside our suggested target range and individually the difference between proposed and actual expenditure for water, wastewater and stormwater varies significantly from year to year. The trend in total expenditure appears to be heading into the target range, however, we note that the result in 2004/05 is skewed a little with the significant overspend in water.

Table 3-12 Comparison of Proposed Vs Actual Expenditure for Gosford Council – 2000/2001 to 2004/2005

Year	Program	Proposed	Actual	Difference	
		(2005/06 \$'000s)			
2000/01	Water	2,884	2,442	-442	-15%
	Wastewater	9,898	2,183	-7,715	-78%
	Stormwater	0	0	0	0%
	TOTAL	12,782	4,625	-8,157	-64%
2001/02	Water	3,962	2,278	-1,684	-43%
	Wastewater	3,991	3,652	-339	-8%
	Stormwater	0	0	0	0%
	TOTAL	7,952	5,930	-2,023	-25%
2002/03	Water	4,400	2,200	-2,200	-50%
	Wastewater	7,400	2,700	-4,700	-64%
	Stormwater	0	0	0	0%
	TOTAL	11,800	4,900	-6,900	-58%
2003/04	Water	5,900	2,500	-3,400	-58%
	Wastewater	9,900	9,000	-900	-9%
	Stormwater	4,439	3,255	-1,184	-27%
	TOTAL	20,239	14,755	-5,484	-27%
2004/05	Water	8,567	10,767	2,200	26%
	Wastewater	8,452	4,781	-3,671	-43%
	Stormwater	4,285	2,431	-1,854	-43%
	TOTAL	21,304	17,979	-3,325	-16%

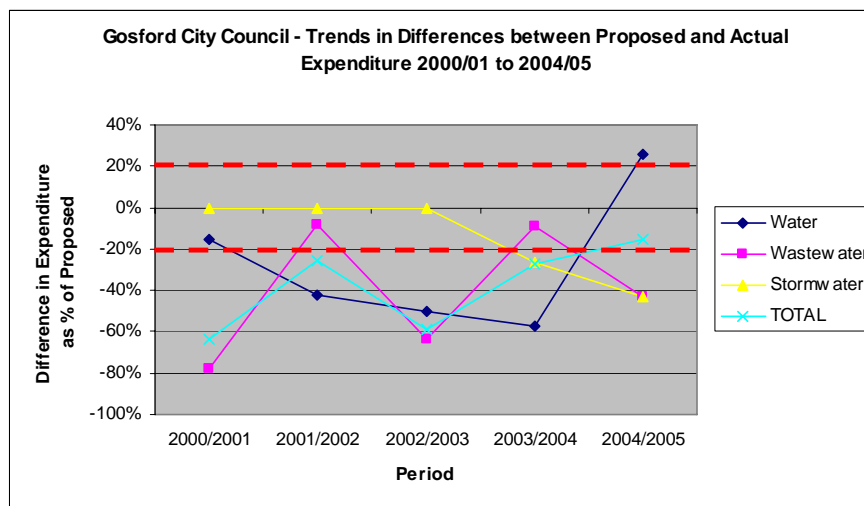


Figure 3-1 Comparison of Proposed Vs Actual Expenditure for Gosford Council – 2000/01 to 2004/05

IPART’s consultant for the 2002/03 review, Halcrow Management Science, raised concerns over Council’s ability to deliver on proposed projects within the determination period. Atkins/Cardno, IPART’s consultant for the 2004/05 review, commented that these concerns had been justified and that they had the same concerns for the determination period covered by the 2004/05 review. IPART’s determination for the 2004/05 review indicated that the Tribunal had taken into account recommendations to re-phase the expenditure program and in some cases reduce the level of activity.

For the current review, the results shown in **Table 3-12** and **Figure 3-1** indicate that Council still has difficulty in achieving the level of capital expenditure proposed in its submissions. This is of particular concern given the current Council submission where the proposed expenditure has significantly increased. **Figure 3-2** shows the actual expenditure for the period period 2000/01 to 2004/05 (solid lines) and the proposed expenditure over the period 2005/06 to 2008/09 (dotted lines), as submitted by Council

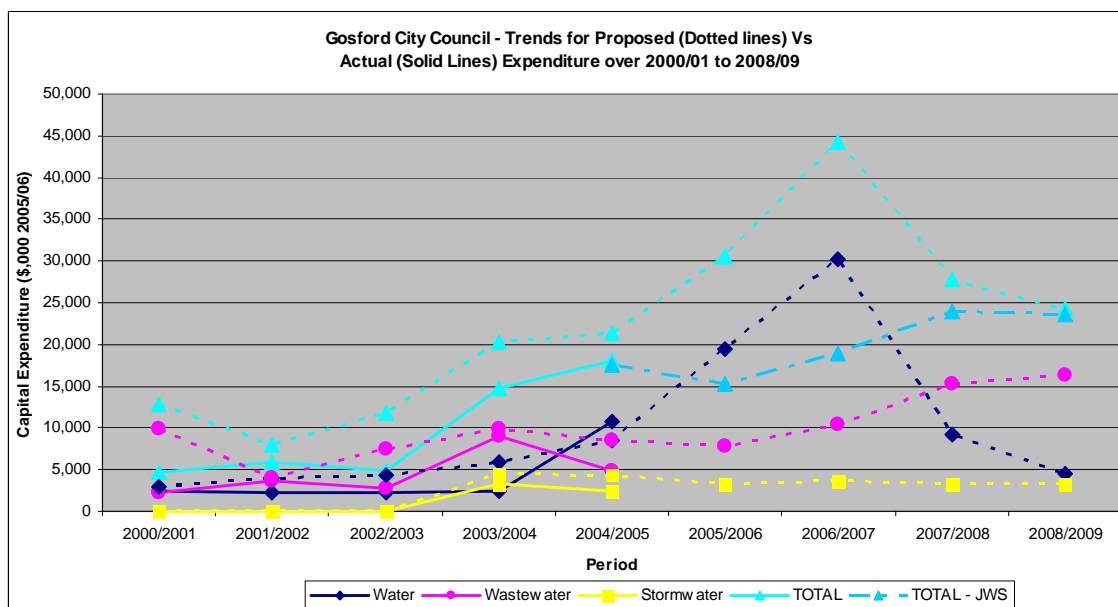


Figure 3-2 Comparison of Proposed and Actual Expenditure - Gosford City Council - 2000/01 to 2008/09

As shown in **Figure 3-2**, the proposed capital expenditure for 2005/06 and 2006/07 is approximately \$30.5 million and \$44 million respectively. These are very large increases in the capital program and there is a concern that, based on the historical performance for actual capital expenditure, Council’s ability to fully meet the forecasts is an important consideration.

We note, however, that Council has allowed expenditure for project management of joint water supply (JWS) works which is, on average, just over 3.6% of the total proposed expenditure on the JWS works. This is a reasonable figure and close to the often used assumption that project management comprises approximately 2.5% of the capital cost. We have assumed that the project management expenditure will cover the engagement of specialist project managers or consultants with this experience and as a result we have assumed that there is a higher likelihood of Council meeting its proposed expenditure forecasts.

If we exclude the JWS works from the “normal” capital program, we see that the proposed total capital expenditure rises from \$15 million in 2005/06 to almost \$24 million in 2007/08 and 2008/09 as shown by the line “Total - JWS” in **Figure 3-2**. The major rise in the expenditure in the last two years of the review period is a result of the North Avoca Sewerage Scheme project which has over \$16 million of proposed expenditure in this period.

We expect then that, although Council’s overall performance in achieving their proposed capital expenditure appears to have been improving, Council may still have difficulty in achieving the expenditure proposed in the final two years of the price path. This would be especially of concern if Council’s performance in the achieving expenditure for wastewater and stormwater projects continues on its current trend (refer **Figure 3-1**).

Assessment of the trend shown in **Figure 3-2** reveals that Council has achieved a growth of 11.3% in actual expenditure on non-JWS projects over the period 2000/01 to 2004/05. On this basis, we consider that it may be appropriate to limit the growth in expenditure to 10% over the review period, using the actual expenditure in 2004/2005 as the base for this growth.

We therefore propose that, as an alternative approach to the project based assessment, the proposed capital expenditure on non-JWS projects could be limited on the basis of historical performance to those shown below:

Expenditure (2005/06 \$’000s)	2005/2006	2006/2007	2007/2008	2008/2009
Potential Maximum Capital Expenditure on Non-JWS Projects	19,777	21,755	23,930	26,323

3.13 *Recommended Capital Expenditure*

We have reviewed the changes in capital expenditure for Gosford Council and the reasons for the changes to determine the recommended capital expenditure forecasts for the review period.

We have taken into account the explanations provided by Gosford Council in the detailed interviews and in subsequent discussions. We have also applied our own judgement, and considered the comments and recommendations from the 2004/05 review, in forming our recommendations.

In the draft report we recommended that the following adjustments to the proposed capital expenditure were appropriate:

- Reduction of \$0.35 million from the desalination plant project.
- Reduction of \$4.78 million from JWS Mardi High Lift Pump Station and Associated Works.
- Reduction of \$3.0 million from JWS Mardi Dam Transfer System project.
- Reduction of \$1.08 million from the Gosford CBD Sewer DSP.

Subsequent to discussions with Gosford Council and IPART at a review of the draft report, Council provided additional information regarding the projects where we had proposed adjustments. This information has been described in the discussion on the various projects to which it relates. As a result of the information provided, we have found it appropriate to revise some of the recommendations made above.

We have also reviewed Atkins/Cardno's recommended efficiency targets and after taking into account the current circumstances faced by Council we have reviewed these original values and recommended new targets.

We now recommend that the following adjustments to the proposed capital expenditure are appropriate:

- Reduction of \$2.825 million from JWS Mardi High Lift Pump Station and Associated Works.
- Reduction of \$0.980 million from JWS Mardi Dam Transfer System project.
- Rephasing of expenditure for JWS Project Management for Major Projects.
- Addition of \$18.000 million for North Avoca Sewerage Scheme.
- Reduction of \$1.715 million on the total capital expenditure for proposed capital efficiency targets.

The Councils proposed capital expenditure and our revised recommended allowable capital expenditure are summarised in **Table 3-13** with full details provided in the Capex Form presented in **Appendix B**.

Table 3-13 Summary - Original and Recommended Allowable Capital Expenditure - Gosford Council - 2005/06 to 2008/09

Council's Proposed Capital Expenditure (2005/06 \$'000s)	2005/06	2006/07	2007/08	2008/09
Water	\$19,509	\$30,245	\$9,148	\$4,596
Sewerage	\$7,802	\$10,380	\$15,258	\$16,325
Stormwater	\$3,274	\$3,606	\$3,376	\$3,354
TOTAL	\$30,585	\$44,231	\$27,782	\$24,275
Total Recommended Capital Expenditure (2005/06 \$'000s)	2005/06	2006/07	2007/08	2008/09
Water	\$19,436	\$29,223	\$6,730	\$4,304
Sewerage	\$7,802	\$10,380	\$14,310	\$13,246
Stormwater	\$3,274	\$3,606	\$3,292	\$3,186
TOTAL	\$30,512	\$43,209	\$24,332	\$20,736

In response to IPART concerns, we have also investigated Council's historical performance in achieving proposed capital expenditure (refer **Section 3.12**). We have identified that Council has experienced some difficulty in achieving their proposed levels of expenditure, and have proposed an alternative assessment of the total capital expenditure to account for this historical trend.

Assuming that the project management expenditure allowed in respect to the joint water supply (JWS) projects will be adequate to ensure implementation of the JWS projects through the use of external consultants, **Table 3-14** shows the maximum level of capital expenditure that we consider could be achieved by Council on the basis of historical performance.

Table 3-14 Proposed Maximum Expenditure Based on Historical Performance - Gosford Council - 2005/06 to 2008/09

Alternative Capital Expenditure based on Historical Performance (\$,000 2005/06)	2005/06	2006/07	2007/08	2008/09
Potential Maximum Capital Expenditure on Non-JWS Projects	\$19,777	\$21,755	\$23,930	\$26,323
Capital Expenditure on JWS Projects	\$15,661	\$24,979	\$2,052	\$717
Maximum TOTAL	\$35,438	\$46,734	\$25,142	\$27,040

A comparison between the recommended total capital expenditure levels presented in **Table 3-13** and the potential maximum expenditure levels based on historical performance presented in **Table 3-14** indicates that Gosford Council should be capable of achieving the recommended expenditure levels.

3.14

Conclusion

Figure 3-3 shows Gosford Council's proposed capital expenditure and the expenditure recommended on the basis of the assessment set out in this report. It also shows Council's 2004/05 capital expenditure submission as well as projections made by Atkins/Cardno for the same period (adjusted for inflation).

Gosford Council's 2005/06 submission has increased from their 2004/05 submission despite the reductions recommended in the Atkins/Cardno report and the Tribunal's decision on which the Halcrow/MMA projections are made.

Council has now taken steps to separately identify stormwater works within their submission, which serves to make the proposed expenditure transparent and is in line with previous recommendations. The impact of water sharing plans over the current review period is expected to be minimal.

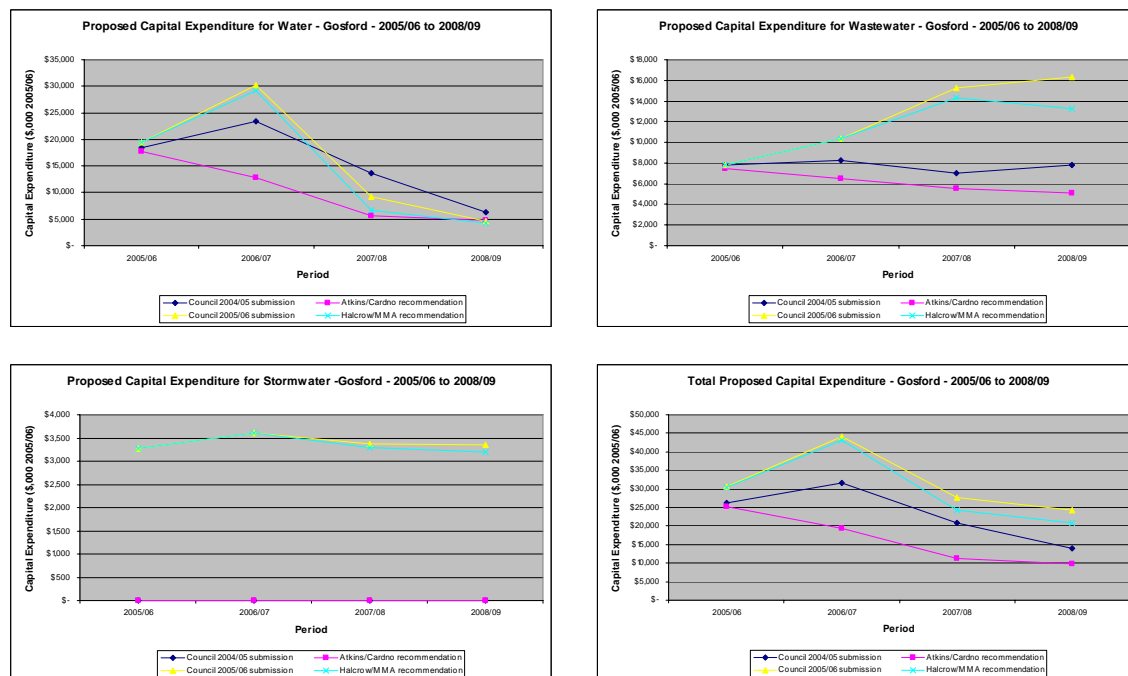


Figure 3-3 Gosford Council Proposed and Recommended Capital Expenditure Projections

4 Operational Expenditure

4.1 *Introduction*

This section discusses the issues related to operating expenditure in Gosford Council's AIR submission. During the review, we held discussions with the Council and sought explanations concerning the following issues:

- Significant Actual (historical) Increases in Operating Cost (**Section 4.2**).
- Significant Projected Increases in Operating Cost (**Section 4.3**).
- Significant Changes to Projected Operating Costs between the 2004 submission and the current submission (**Section 4.4**).
- Basis of Corporate Cost Allocation to Water, Wastewater and Stormwater (**Section 4.5**).
- Historical Alignment of Budget to Actual Costs (**Section 4.6**).
- Performance Benchmarking (**Section 4.7**).
- Efficiency Targets (**Section 4.8**).

4.2 *Significant Actual Operating Cost Increases*

A number of large increases in operating costs were noted in the current AIR submitted to the Tribunal. Council was asked to provide an explanation to these increases and discussions were held with Council staff to obtain a view on the reasonableness of these increases. The increases and their related explanations are detailed below:

- An increase of 30% in labour costs between 2003 and 2004 and a 15% increase to 2005 have been a result of a number of factors, including:
 - Award rates of pay have increased since 2002/003 by approximately 10%. This, however, is not a significant contributor to the increase.
 - A restructure late in 2003 impacted on the labour cost of 2003/04 as it included redundancy payouts and additional staff hiring.
 - Labour costs in 2002/03 did not include Stormwater related labour. This was included in the following two years when Stormwater services were transferred into the Water Agency from General Council operations.
 - Most importantly, the oncost rates have been increased on the advice of the Council's financial auditors to reflect increased workers compensation charges and to account for costs related to training, human resources and leave entitlement reserve. As a result, the original 37% oncost rate was increased to almost 55% for salaries while the rates on wages increased to over 78%.

- Large increases in materials costs were the result of the transfer of Stormwater service responsibilities which added over \$1 million annually to the materials cost since 2002/03.
- The increases in corporate management in 2002/03 and 2003/04 are the results of cost allocations from the Council's General fund. Gosford Council allocates 25% of corporate overheads to each of Water and Wastewater Services. Accordingly, increases in general Council overheads flow through to the Water Agency. The Water Agency business has little control over this allocation.
- The increases in Water Storage and Abstraction in 2002/03 and 2003/04 are a result of higher labour and material costs, higher electrical costs as well as increased costs due to the need to meet higher standards.
- The increases in Water and Wastewater materials between 2002/03 and 2004/05 are a result of including the cost of hiring external contractors and consultants in the materials category due to internal difficulties in the project costing system. These difficulties have subsequently been resolved by a restructuring of the accounting system.
- The increases in water customer/support services costs are due to the cost of communicating the impact of the drought to customers and the need for water conservation.
- A large increase in maintenance expenditure to sewer mains, tunnels and pumping stations explains the 18% increases in Wastewater collection/transportation in both 2005 and 2006
- The large annual increases in Wastewater treatment since 2001 is explained by staff increases as a result of filling previous vacancies (4) and redundancy payments made as a result of the Council restructuring. Repairs were also carried out to the pumping station including the hiring of two additional fitters (fulltime) to maintain the plant prior to its expected replacement date.
- Large annual increases in Wastewater sludge/effluent disposal were the result of increases in the contract cost for the removal of biosolids from the treatment works. In 2003/04 the contract cost was around \$300,000 pa. From 2004/05 onwards, the contract cost increased to over \$1 million pa.
- The 68% increase in Wastewater customer service in 2005 is due to dividend and tax equivalent payments¹ made by customer services.

¹ Dividend and tax equivalent payments are provided for in the Gosford Council AIR submission as a Wastewater customer service cost. In 2005, dividend payments of over \$1.7 million and tax equivalent payments of \$158,000 were made.

- The increase in Stormwater operation in 2005 is due to the commencement of the Kahibah Creek maintenance project and also an increase in repairs and maintenance. Costs in 2004 were lower than usual as emphasis was placed on road maintenance instead².

4.3

Significant Projected Cost Increases

Similarly, a number of significant increases in the projected operating costs were noted in the Council's AIR submission. Council was asked to provide an explanation to these increases and discussions were held with Council staff to obtain a view on the reasonableness of these increases. The increases and their related explanations are detailed below:

- New estimates of the cost of ground water have resulted in significant increases over 2005/06 to 2008/09 for Water Storage and Abstraction. In 2005/06, the increase is forecast to be approximately \$617,000 while in 2006/07, the increase is about \$1.25 million.
- Similarly, new estimates for the purchase of bulk water from Hunter Water have resulted in substantial increases in bulk water purchases over the forecast period. The increase is estimated at \$875,000 in 2005/06, increasing to \$1.66 million in 2006/07, \$2.48 million in 2007/08 and \$2.54 million in 2008/09 as a result of the continuing drought in the region.
- The cost of energy is expected to rise as the ground water project becomes operational due to an increase in pumping costs as more bores come online.
- The increase in Stormwater operation of \$650,000 in 2005/06 is largely due to the Trial GIS Lagoons project (\$100,000) and a continuation of the Kahibah project (\$342,000) as well as continuing increase in the repairs and maintenance budget (\$200,000).

4.4

Significant Changes in Forecast Cost

Of particular interest to the Tribunal are changes to the forecast costs between the 2004 and the current submissions. On instructions from the Tribunal, particular attention has been paid to key changes with a threshold that is greater than \$40,000. The following summarises the key changes:

- The previous 2004 forecasts did not include the operation and maintenance of ground water in water storage and abstraction. This resulted in significant cost increases above the 2005/06 to 2008/09 forecasts.

² Road and stormwater use the same maintenance crew.

- The increase in bulk water purchases from Hunter Water as a drought contingency of about \$750,000 in 2006/07 increasing to \$1.5 million in 2007/08. This coincides with the construction of the Hunter Water connection resulting in the very substantial difference in bulk water purchases.
- Water customer support services have increased by over 70% over 2005/06 to 2008/09. Part of the reason for this increase is the need to increase and improve communications with customers as the drought continues and as the Council seeks to encourage customers to conserve water usage.
- Wastewater collection/transportation projections have increased by 20% over the 2005/06 to 2008/09 period. This is due to a projected increase in maintenance for sewer mains, tunnels and pumping stations as well as the increase in labour oncost allocation.
- Similarly, the increase in labour oncost has resulted in an increase in projected Wastewater treatment of 15% over the 2005/06 to 2008/09 period.
- The inclusion of a \$1.8 million dividend from Wastewater customer support services has resulted in a projected 125%pa increase in cost over 2005/06 to 2008/09. The previous submission did not include any provision for dividend payments.
- The inclusion of stormwater services within the Council's Water Agency has resulted in the addition of over \$4.5 million to Stormwater costs. This is balanced by the removal of \$3 million previously provided for under a corporate allocation.

A comparative summary of the difference in projected operating expenditure between the Council's AIR 2004 submission and the current submission is presented in **Table 4-1**, together with a brief explanation of the reasons for the differences.

Table 4-1 Comparison of 2005 AIR Opex Submission with 2004 AIR Opex Submission

Item	Submission Differences (\$'000s)				Reasons for Changes
	2005/06	2006/07	2007/08	2008/09	
AIR Table 3.1 – Operating Expenditure of Consolidated Business Activities (nominal \$'000)					
Labour (excl employee provisions)	1,206	1,188	977	931	Increased rate of oncost applied
External consultants	249	244	252	260	Consultancy previously shown under Materials
Hire & contract services	3,933	4,151	4,253	4,387	Hire & contract services previously shown under Materials
Bulk water purchases	9	789	1,616	2,544	Increased purchases from Hunter Water
Materials	- 850	- 1,114	- 1,498	- 1,625	Materials related to Groundwater project going ahead
Energy	271	590	589	588	Electricity increase related to Groundwater project going ahead
Other	2,443	342	- 421	- 1,226	Drought contingency work plus some one off operational items
Employee provisions	2,005	2,021	2,035	2,048	Provision for leave and workers compensation
AIR Table 3.2 – Operating Expenditure of Core Business Activities (nominal \$'000)					
Labour (excl employee provisions)	1,206	1,188	977	931	Increased rate of oncost applied
Payments to associated unregulated (ie non-core) businesses	3,320	46	131	114	Increase in corporate cost allocation
External consultants	249	244	252	260	Consultancy previously shown under Materials
Hire & contract services	3,933	4,151	4,253	4,387	Hire & contract services previously shown under Materials
Bulk water purchases	9	789	1,616	2,544	Increased purchases from Hunter Water
Materials	- 850	- 1,114	- 1,498	- 1,625	Materials related to Groundwater project going ahead
Energy	271	590	589	588	Electricity increase related to Groundwater project going ahead
na	- 3,000	- 3,000	- 3,000	- 3,000	Stormwater cost allocation removed
Other	2,123	3,296	2,448	1,660	Drought contingency work plus some one off operational items
Employee provisions	2,005	2,021	2,035	2,048	Provision for leave and workers compensation
AIR Table 3.3 – Operating Expenditure of Core Business Activities by Function (nominal \$'000)					
Corporate					
- management	- 344	280	152	131	Increased rate of oncost applied
- other	630	- 3,000	- 3,000	- 3,000	Removal of stormwater allocation
Water					
- storage, abstraction	649	1,359	1,176	1,170	Increased groundwater expenditure
- purchase of bulk water	187	792	1,620	1,682	Increased bulk water purchase from Hunter Water
- treatment	99	94	88	83	Increased treatment of groundwater
- customer/support services	1,650	1,345	1,308	1,432	Increased communication with customers due to drought
Wastewater					
- collection/transportation	1,182	1,212	1,250	1,289	Increased maintenance of sewer mains and tunnels
- treatment	391	393	429	442	Increased maintenance of sewage pumping stations and increased cost of biosolids removal contract
- customer services	2,641	2,799	2,814	2,835	Increased dividend payment to Council
Stormwater					
- operation	3,949	3,986	4,027	4,148	New responsibility for stormwater services
AIR Table 3.4 – Operating Expenditure of Core Business Activities by Item (nominal \$'000)					
Corporate					
Payments to associated unregulated (ie non-core) businesses	- 344	280	152	131	Payment of corporate cost allocation
na	630	- 3,000	- 3,000	- 3,000	2006 increased recovery of stormwater cost and subsequently removal of stormwater allocation
Water					
Labour (excl employee provisions)	204	310	222	128	Increased rate of oncost applied
External consultants	138	118	122	126	Reclassification of cost – previously classified under Materials
Hire & contract services	438	513	522	544	Reclassification of cost – previously classified under Materials
Bulk water purchases	187	792	1,620	1,682	Increased bulk water purchase from Hunter Water
Materials	- 95	- 250	- 251	- 514	Reclassification of cost – previously classified under Materials
Energy	314	633	634	634	Increased groundwater electricity expenditure
Employee provisions	483	474	466	453	Increased rate of oncost applied
Wastewater					
Labour (excl employee provisions)	32	- 81	- 194	- 312	Increased rate of oncost applied
External consultants	111	126	130	134	Reclassification of cost – previously classified under Materials
Hire & contract services	2,984	3,127	3,220	3,317	Reclassification of cost – previously classified under Materials + increased cost of biosolids removal
Materials	- 1,932	- 2,166	- 2,291	- 2,425	Reclassification of cost – previously classified under Materials
Other	1,760	2,021	2,066	2,276	Provision of increased tax equivalent and dividend payment not previously budgeted
Employee provisions	1,223	1,244	1,258	1,275	Increased rate of oncost applied

4.5

Basis of Corporate Cost Allocation to Water, Waste Water and Stormwater

Cost allocation needs to be undertaken whenever joint or shared costs exist. Joint costs are incurred when services, processes, materials or equipment are used to produce more than one output product or service. Gosford Council provides water, wastewater and stormwater services that are price regulated as well as general council operations like roads, parking, urban planning and recreational services which are not price regulated. To be effective in the economic/price regulation of the water related services, costs associated with providing non-regulated services should be removed from the cost base to determine the costs of providing regulated services. It is clear that corporate and other services would normally be considered as joint costs and should be allocated on the basis of the appropriate cost drivers.

The allocation of costs between different parts of a business is often arbitrary and can be highly controversial. Where there are direct cost drivers, costs can be causally allocated. However, indirect costs, such as the cost of corporate support functions, often do not have a simple cost driver. This creates the more complex task of attempting to allocate common costs which are not directly attributable. Proxies must then be found to form the basis for allocation. The key then is to determine an activity based allocator which most closely reflects the actual cost drivers.

Gosford Council allocates corporate overheads to the water, wastewater and stormwater businesses on an arbitrary 50% flat rate. The overheads include the Council's promotional activities including fireworks displays as well as:

- Computer Services (IT);
- Council Elected members;
- Legal Services;
- Elections;
- Stores;
- Management Accounting;
- Financial Accounting;
- Property;
- Rates;
- Debt recovery;
- Revenue;
- Accounts Payable;
- Purchasing;
- Contract Management;
- Building Maintenance;
- Customer Service;

- Senior Management Group;
- Strategic Management;
- Management Auditing;
- Corporate relations; and
- Depot running costs.

In 2006/07, general Council overheads are projected to amount to approximately \$20.3 million of which \$10.16 million is allocated to the regulated water, waste water and storm water services. This overhead is then allocated (again arbitrarily) 47% each to Water and Wastewater, and 6% to Stormwater.

As a result of this allocation, corporate costs account for 26% of Water opex, 23% of Wastewater opex and 6% of Stormwater opex. In total, corporate costs account for 23.7% of Water Agency's total operating expenditure. In its 2005 determination on metropolitan water agency prices, the Tribunal allowed Sydney Water's corporate costs to amount to 18.6% of its total opex over the 2005/06 to 2008/09 regulatory period while Hunter Water's corporate costs amounted to 23.5% of its total operating expenditure over the same period. While this would suggest that the total quantum of corporate cost allocated to Water, Wastewater and Stormwater Services may not be too far off the mark (albeit perhaps on the high side), the methodology of allocation is not appropriate. It is also questionable whether the regulated businesses should be partly funding the political process of elections of Council members or Council promotional activities not related to water, wastewater or stormwater services. We recommend that the Tribunal reduce the current corporate cost allocation by \$200,000³. This would bring total corporate cost allocation to \$9.96 million or 22.8% of total operating expenditure. This would also be within the general level of corporate cost allowed by the Tribunal for Sydney Water and Hunter Water.

We have been informed by the Water Agency that a process has been put in place to change the methodology used to allocate shared corporate costs. A system of cost drivers has been developed for each service area and it is proposed that the change will commence from the 2006/07 financial year. Gosford Council has provided the list of proposed cost drivers and the methodology and indicated that Council's draft 2006/07 budget is being prepared using the proposed cost driver based methodology of corporate allocation. While we believe this to be a vastly superior method of calculation than the one previously employed, we continue to have some concerns regarding some of the cost items allocated to the Water Agency including costs related to Council elections, Gosford festival, Australia Day celebrations and the Community Newsletter. These are major cost items

³ We note that in 2005, Atkins recommended an adjustment of \$500,000 to Gosford Council's corporate cost allocation.

amounting to almost \$400,000. In addition, there are allocated a number of smaller cost items relating to cultural or sporting events that may not be part of the normal operating cost of a water agency which in total amounts to an additional \$150,000. Nevertheless, we commend this proposed change and recommend that the Tribunal remove the \$200,000 reduction to corporate allocation once it is satisfied that the proposed cost allocation methodology has been changed and is satisfied that the cost drivers and methodology implemented is appropriate.

4.6

Historical Alignment of Budget to Actual Costs

We have also evaluated the accuracy of the Water Agency's budget by comparing it with the actual costs for each of the cost areas, that is, Corporate, Water and Wastewater. As the Water Agency did not have responsibility for Stormwater in the past, the comparison was not made for this service.

Figure 4-1 shows how actual allocated corporate costs compare against the budget over the last four years. In the initial three years, actual costs were significantly greater than the budget, averaging almost \$1.9 million pa over this period. However, the trend changed in the last year with actual cost coming in just under budget.

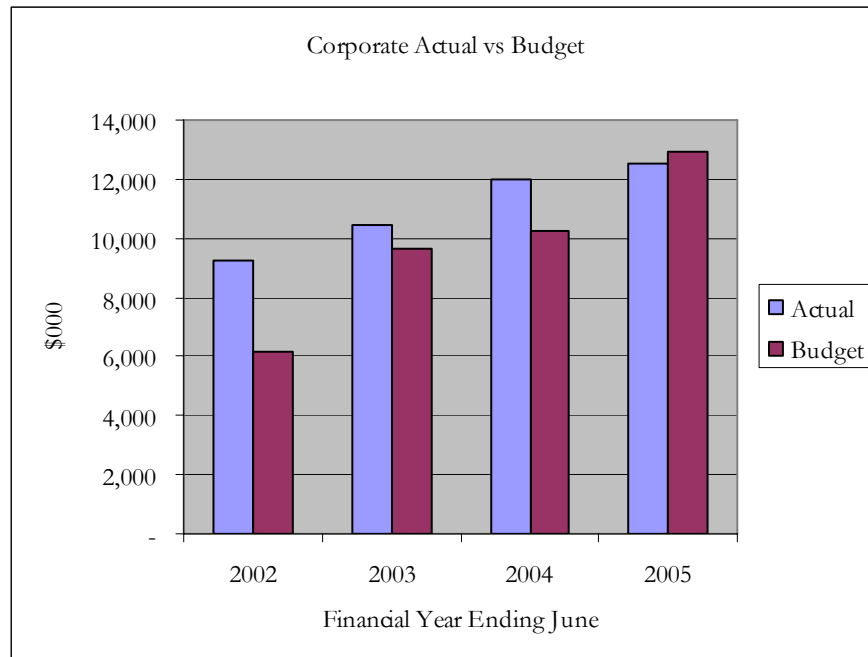


Figure 4-1 Comparison of Corporate Cost – Actual vs Budget

In Water Service, the operating expenditure budget is consistently higher than the actual operating expenditure, except for 2005. To some extent this balances out the under budgeting of corporate costs for 2005. The comparison is shown in **Figure 4-2**.

Similarly, the operating expenditure budget for Wastewater Service, is consistently higher than actual operating expenditure except for 2005 which again to some extent this balances out the under budgeting of corporate costs for 2005. The comparison is shown in **Figure 4-3**.

Overall, the budget seems to be fairly well aligned with actual costs especially in 2002/03 and 2003/04. This is shown in **Figure 4-4**. In 2004/05, however, actual costs were some \$2.1 million above budget which may suggest an under-recovery of costs that is unsustainable in the longer term if the situation develops into a trend. However, it could simply be a reflection of the drought where unbudgeted extra expenditure was needed to address its severity.

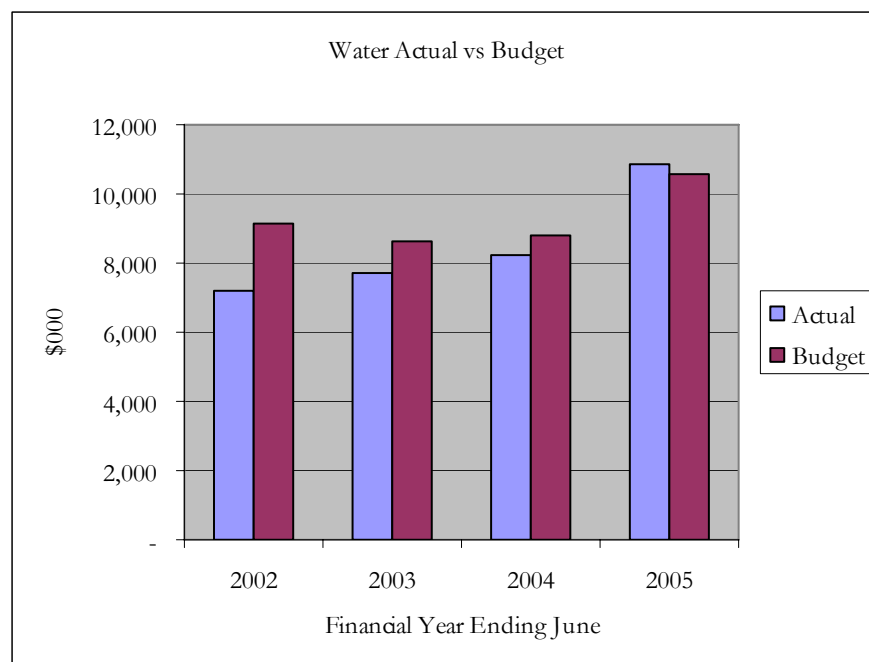


Figure 4-2 Comparison of Water Cost – Actual vs Budget

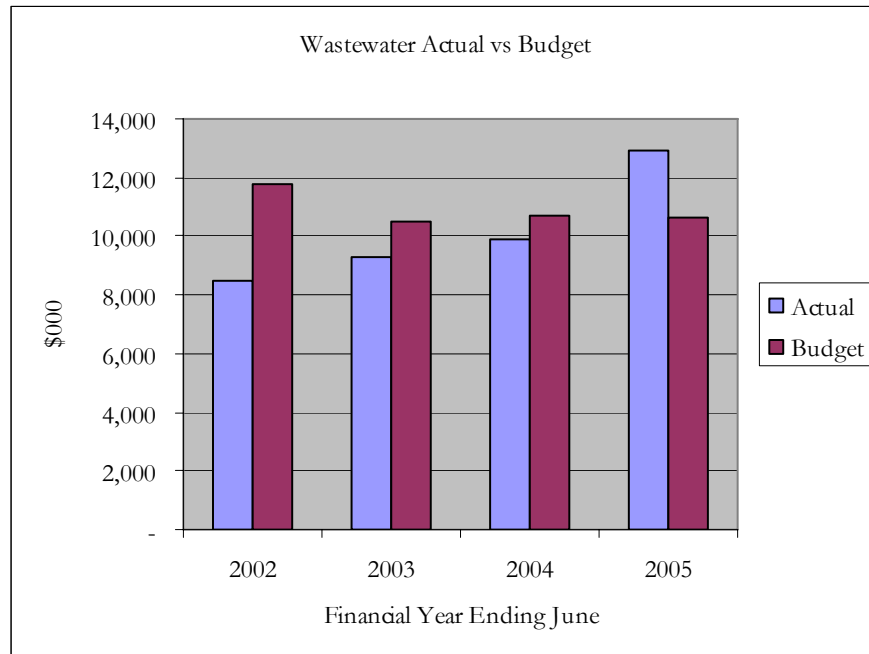


Figure 4-3 Comparison of Wastewater Cost – Actual vs Budget

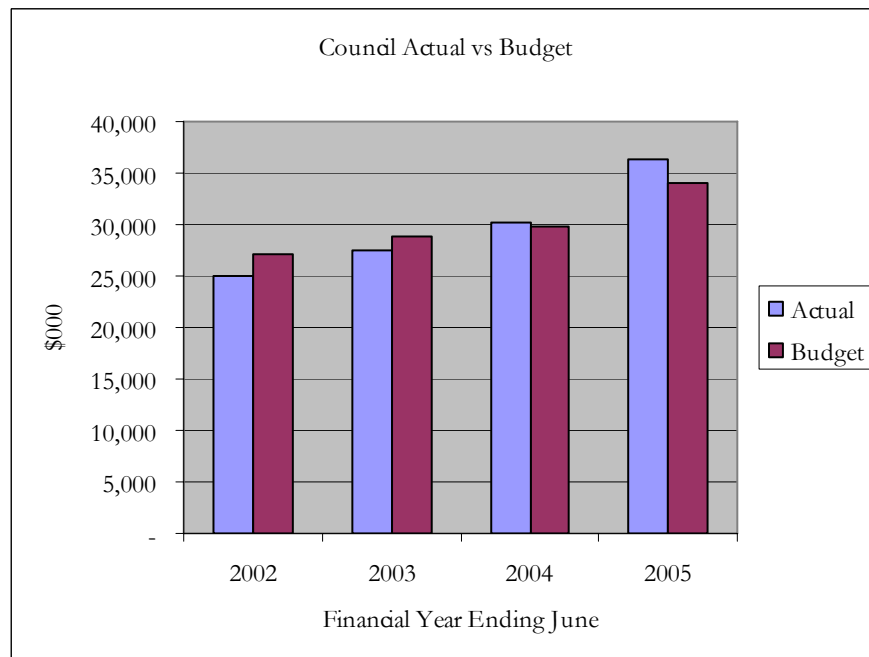


Figure 4-4 Comparison of Council Cost – Actual vs Budget

4.7

Performance Benchmarking

Council provided the results of performance benchmark studies undertaken by the NSW Department of Energy, Utilities and Sustainability (DEUS) for water supply and sewerage. These studies (for 2002/03 and 2003/04) indicate that in a number of performance indicators, the Council has been rated fairly highly. However, in terms of economic efficiency, the Council's ranking is not as high.

In Water with a rating of 5, the operating cost per 100km of main has been rated as being in the lowest 20% of the state's water authorities in both years. Operating cost per kL of water delivered has also been poor, being rated at 4 in both years. While the operating cost per property has been rated at 1, in the top 20%, Management has attracted a rating of 4 in 2002/03 and a rating of 5 in 2003/04 (possibility a reflection of the corporate cost allocation methodology) while other cost per property has been rated in the second 20 percentile with a rating of 2. These ratings suggest that there may be some scope for improving the operating efficiency of Water supply.

Similarly, in sewerage, economic performance is rated at below the NSW average although it appears to be improving. Operating cost per 100km of main was rated as being in the second lowest 20% with a rating of 4 in 2002/03 improving to a rating of 2 in 2003/04. Operating cost per kL has been rated average at a rating of 3 in both years. While operating cost per property has been similarly rated at 3, Management costs are higher than average, attracting a rating of 5 in both years. Once again, these ratings suggest that there may be some scope for improving the operating efficiency of Wastewater services.

Water Services Association of Australia also publishes a set of key performance indicators in its annual *WSAAfacts* including operating cost per property for water supply services and wastewater services for a number of urban water agencies in Australia and New Zealand. In its 2005 publication, out of the 20 Australian urban water authorities reported on, Gosford Council was found to be ranked 13th in operating cost per property for water supply services and 18th in operating cost per property for wastewater services (see **Table 4-2**) These ranking also suggest that Gosford Council is not on the production frontier with regards to operating costs and that efficiency gains are possible to improve its ranking as well as in general ongoing productivity gains.

Table 4-2 Operating Cost per Property

\$/property	2000	2001	2002	2003	2004	2005
Water Supply						
Gold Coast Water	121.79	118.54	125.90	167.28	183.77	155.23
Hunter Water	184.12	179.57	190.50	195.02	158.11	161.69
SA Water Corp	182.36	181.56	167.51	183.12	169.77	172.02
Water Corporation	161.28	156.66	157.44	152.50	161.04	172.90
South East Water	193.73	180.04	170.03	179.37	167.49	174.21
Yarra Valley Water	168.45	162.61	164.59	176.58	160.43	176.46
Brisbane Water	205.43	208.69	221.51	197.88	196.15	210.58
Barwon Water	258.07	241.33	206.42	208.86	219.09	225.78
Maroochy Water					216.85	227.14
Sydney Water	295.62	277.54	239.93	250.64	221.17	230.05
Coliban Water	243.37	195.17	179.56	268.89	251.08	250.05
Goulburn Valley Water	241.10	235.27	238.21	271.55	242.22	266.81
Gosford City Council	184.39	208.97	200.92	211.27	215.77	268.16
City West Water	314.40	290.23	271.32	287.08	273.96	292.18
ACTEW	208.02	230.44	266.94	270.47	291.08	297.85
Ipswich Water			313.17	309.99	316.25	300.98
Logan Water				303.85	286.47	301.03
Power & Water Corp	548.02	399.37	289.97	370.61	393.90	307.05
Central Highlands Water	271.73	321.27	342.01	406.12	378.08	320.09
Central Gippsland Water	333.50	317.69	292.78	311.31	317.75	354.21
Wastewater						
SA Water Corp	132.32	120.16	124.84	126.5	134.94	142.63
Hunter Water	158.82	149.3	183.59	181.87	157.61	155.49
Brisbane Water	157.54	139.85	186.57	196.53	169.26	160.39
Water Corporation	161.19	148.61	147.25	150.8	166.59	172.34
Logan Water				170.55	176.62	178.64
Gold Coast Water	173.48	176.01	176.17	183	201.98	196.01
Sydney Water	275.73	244.23	283.72	272.89	198.95	199.14
Barwon Water	199.58	208.24	177.84	186.35	196.76	200.02
South East Water	204.7	190.7	189.7	188.19	187.93	200.83
Maroochy Water					219.81	225.22
City West Water	233.66	217.38	204.13	206.24	203.62	229.99
Yarra Valley Water	221.89	208.78	194.83	197.5	203.36	234.41
Coliban Water	147.29	231.99	222.63	2152.51	226.82	237.74
Ipswich Water			305.19	293.11	291.66	243.9
ACTEW	244.22	247.9	262.18	267.56	277.45	270.18
Central Highlands Water	152.92	139.99	160.13	138.9	166.02	279.39
Power & Water Corp	562.12	322.92	280.81	347.41	305.57	291.14
Gosford City Council	211.66	234.37	229.69	244.2	247.76	301.95
Goulburn Valley Water	217.46	244.74	263.2	267.93	261.2	312.61
Central Gippsland Water	347.53	338.5	337.02	342.07	306.99	375.19

Source: WSAA, WSAAfacts 2005

4.8

Efficiency Targets

Gosford Council has not explicitly provided any productivity improvements in their forecast of Opex. During our discussions with Council, it was apparent that the organisation had not made any specific provisions for productivity gains over the next regulatory period.

Atkins/Cardno in its report to the Tribunal in 2005 suggested a 1.3% pa efficiency target for this regulatory period. In its *Expenditure Forecast Review for the Victorian Regional Urban Water Businesses* for the Victorian Essential Services Commission in December 2004, SKM “considered that a modest but reasonable target for productivity improvement” of 0.5% pa for the larger regional urban water businesses except for Central Highlands Water, which had proposed explicit higher productivity targets, and 0.25% for the smaller regional urban water businesses would be appropriate. Currently, during its price review, Goulburn Murray Water has targeted a productivity improvement of 3.5% over the next 2 years, 5% within 3 years and 12% within 5 years. Information from the Australian Bureau of Statistics and the Productivity Commission suggest that productivity in Australia is increasing on average at about 1% pa.⁴

In its water price review decision on Victoria’s urban water authorities in June 2005, the Essential Services Commission applied a 1% productivity target after adjusting for growth. In the UK, the Office of Water Services believes that the scope for efficiency improvements is around 3% each year⁵.

There is clearly an opportunity for Gosford Council to modestly restrain operating expenditure while increasing its maintenance levels by increasing productivity. We have assumed a continuing capital and labour efficiency of 1.2% pa over the next regulatory period to reflect the impact of new technology and innovation which all organisations, including efficient organisations, should achieve. The target is a modest 0.2% higher than the average Australian productivity improvement to reflect the potential for Gosford Council to improve its performance relative to the average Australian company given its relatively low ranking among Australian water agencies.

As a result, cost projections based on the average cost of providing regulated services over the last four years have been adjusted by an estimate of operating

⁴ Productivity in the Market Sector, 5204.0 Australian System of National Accounts Table 22, Australian Bureau of Statistics, 7 November 2005 and Australia’s Industry Sector Productivity Performance, Productivity Commission, November 2003.

⁵ Water and sewerage service unit costs and relative efficiency 2004-05 report, Ofwat, December 2005.

expenditure improvements of 1.2% pa prior to any cost increases for new products or services like the Hunter Water connection, groundwater supplies or stormwater.

4.9 *Recommended Projections*

4.9.1 *Recommendations*

The resulting projections after taking into consideration the additional costs involved in establishing the increased capacity of the Hunter Water connection, additional groundwater sources and stormwater responsibilities as well as the efficiency targets are provided in **Table 4-3**.

The efficiencies are applied to the operating cost forecast to determine a base operating expenditure profile with adjustments made for additional costs from new responsibilities.

4.9.2 *Adjustments Made*

All projections are made on the basis of the Tribunal's 2004/05 operating expenditure decision for 2005/06, adjusted for inflation based on the Tribunal's inflation estimate for 2005/06 at 2.4%. Other adjustments are as follows:

- An efficiency adjustment is made based on ABS and Productivity Commission estimates of average productivity growth of Australian companies⁴ of 1% and a 0.2% additional productivity gain to improve the organisation's competitiveness relative to the average Australian company.
- A reduction of \$200,000 pa is made to Gosford Council's corporate cost allocation to reflect the unsatisfactory allocation methodology. This is a smaller reduction than that recommended by Atkins/Cardno (\$500,000) to reflect moves by Gosford Council to amend the methodology and should be removed once a satisfactory allocation methodology is implemented. (see **Section 4.5**).
- An adjustment of \$300,000 and \$900,000 is provided in Water Service and Wastewater Service respectively to reflect the increase on-cost rate applied.
- Purchase of bulk water from Hunter Water - the connection to Hunter Water is expected to reach full capacity towards the end of 2006. The adjustment for bulk water reflects the increase in bulk water purchase costs from 1 January 2007 onwards.
- Groundwater - the cost of extracting, monitoring and treating groundwater is expected to cost around \$500,000 in 2005/06 and \$1.25 million in 2006/07 and about \$1 million thereafter. This is an additional cost as the previous submission had not envisaged the need for groundwater at this stage.

Table 4-3 Recommended Operating Cost Projections

Item	Unit	2005/06	2006/07	2007/08	2008/09
Proposed by Council (nominal 2005/06 \$)					
<i>Corporate</i>					
Projected operating expenditure	\$000	13,200	10,160	10,266	10,266
<i>Water</i>					
Projected operating expenditure	\$000	11,925	13,558	14,426	14,778
<i>Wastewater</i>					
Projected operating expenditure	\$000	14,882	15,249	15,622	16,011
<i>Stormwater</i>					
Projected operating expenditure	\$000	3,949	3,986	4,027	4,148
Total Projected Opex	\$000	43,956	42,953	44,341	45,203
Recommended Opex (real 2005/06 \$)					
CPI	2.4%	2006	2007	2008	2009
Efficiency adjustment	% pa		- 1.2%	- 1.2%	- 1.2%
<i>Corporate</i>		Base	Projections		
Base Corporate Allocation	\$000	9,216			
Corporate cost adjustment	\$000		- 200	- 200	- 200
Recommended Corporation Allocation	\$000	9,216	8,905	8,599	8,295
<i>Water</i>					
Opening Base Opex	\$000	11,264			
Adjustment for increase in On-cost Rate	\$000	300			
Adjusted Base Opex	\$000	11,564	11,425	11,288	11,153
Adjustment for increase in bulk Hunter Water purchases	\$000		700	1,500	1,500
Adjustment for increase in Groundwater	\$000	500	1,000	1,000	1,000
Adjustment for Reticulation	\$000	- 1,000	- 200	- 1,250	- 2,250
Recommended Water Opex	\$000	11,064	12,925	12,538	11,403
<i>Wastewater</i>					
Base Opex	\$000	10,854			
Adjustment for increase in On-cost Rate	\$000	900			
Adjustment for additional maintenance of plant	\$000	1,300			
Adjustment for additional biosolids removal cost	\$000	700			
Recommended Wastewater Opex	\$000	13,754	13,589	13,426	13,265
<i>Stormwater</i>					
Base Opex	\$000	3,000	2,964	2,928	2,893
Adjustment for increase in On-cost Rate	\$000	100			
Adjustment for Kahibah Creek project	\$000	340	340	340	340
Recommended Stormwater Opex	\$000	3,440	3,304	3,268	3,233
Total Recommended Opex	\$000	37,474	38,724	37,831	36,196

- Reticulation – Gosford Council advised that some drought contingency works previously provided for are no longer required or have been revised.
- There is an increased need to maintain the sewerage plant as it is reaching the end of its life. The additional cost is estimated at around \$1.3 million pa until the facilities are replaced.
- A new contract for the removal of biosolids was for about \$700,000 more per annum than the previous contract.
- The Trial GIS Lagoons stormwater project is continuing for another year while the Kahibah Creek project continues for the remainder of the regulatory period.

4.10

Conclusion

Figure 4-5 shows Gosford Council's opex request and the resulting recommended operating expenditure. It also shows Council's 2004/05 opex submission as well as projections made by Atkins/Cardno for the same period (adjusted for inflation). No separate Stormwater data is available from the 2004/05 submission as it was included in the corporate allocation.

Gosford Council's 2005/06 submission has increased from their 2004/05 submission despite the reductions recommended in the Atkins/Cardno report or the Tribunal's decision on which the Halcrow/MMA projections are made. Stormwater costs are removed from Corporate allocations in response to the Tribunal's 2004/05 requirement to improve the transparency of its Stormwater arrangements with the intention of setting a separate stormwater drainage charge to apply from 1 July 2006. As a result, Council has explicitly provided a separate Stormwater opex.

In Water services, the impact of the drought has required Gosford Council to provide more resources to secure additional supplies from Hunter Water and groundwater, thus justifying the cost increases. In Wastewater, the 2005/06 submission is corrupted by the inclusion of \$1.8 million of dividend payments which was not included in previous submissions. We have not accepted this as a valid adjustment and have accordingly not provided for it in the projections. We have allowed for additional funds in Wastewater to provide additional maintenance as well as the higher cost for the removal of biosolids.

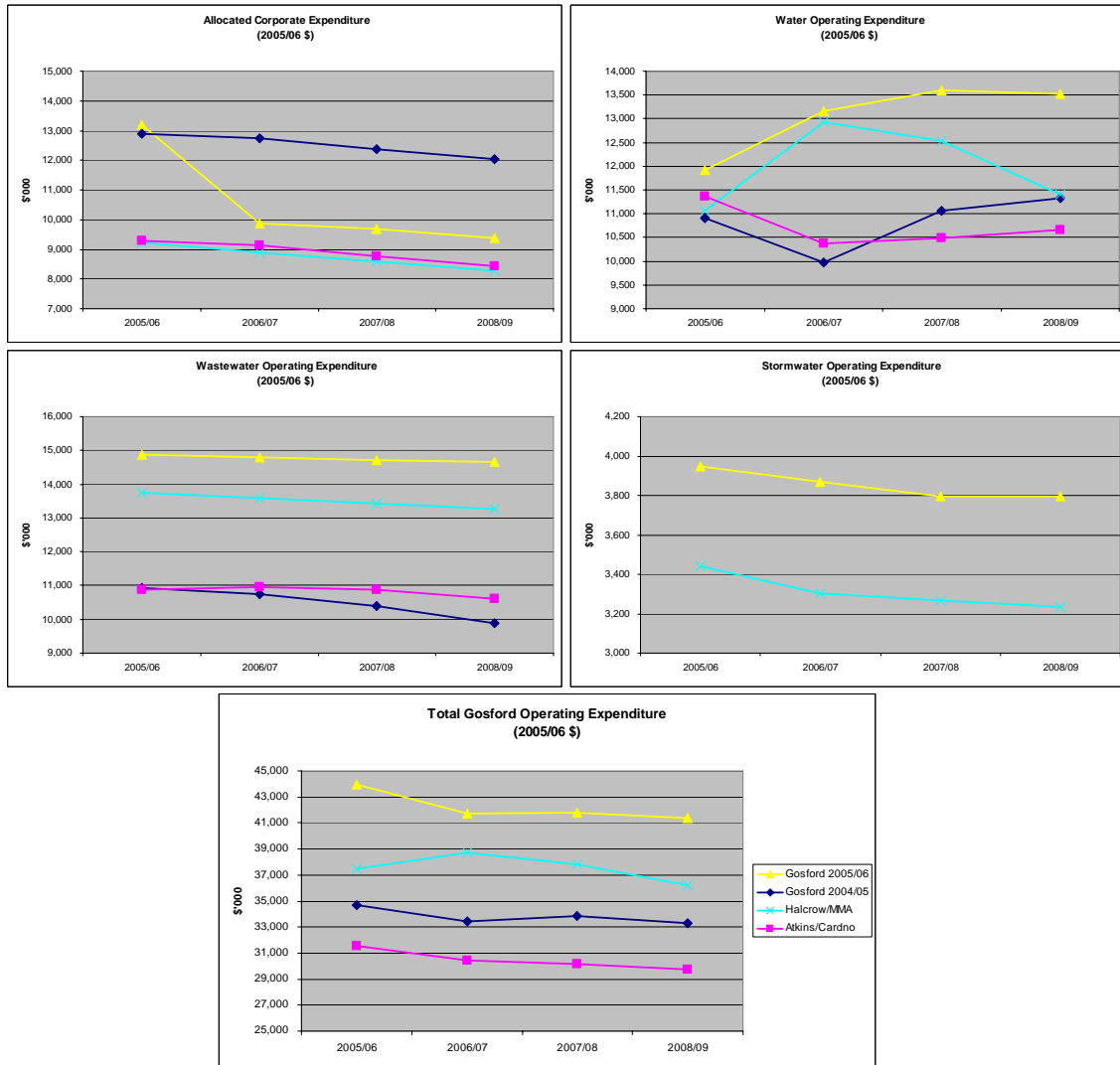


Figure 4-5 Gosford Operating Expenditure Projections

5 Asset Management

5.1 *Information required*

A key part of the review process was to consider how the Gosford Council manages their assets. The interviews reviewed the current asset management system and identified any changes to the system made as a result of recommendations arising from the previous review by Atkins/Cardno. Additional expenditure has been proposed in Council's submission to upgrade, develop and implement a new asset management system. The review considered the justification for this proposed expenditure and the expected outcomes of the improved system to ensure that the expenditure is efficient.

Specific information that was requested for the interviews included the following:

- Details of the new or improved asset management system.
- Details of expenditure for the development and implementation of the new system.
- Details of expected outcomes from the new system.
- Details of any benchmarking of the new or improved system against existing best practice in Australia.

5.2 *Comments/Recommendations*

The following points summarise our discussions with Council regarding the status of their asset management system. Council are currently in the process of implementing a complete upgrade of the system:

- Council's asset management system is to be implemented as a system wide initiative covering all the council groups, not just the water and wastewater group.
- Council now has a fully functional and upgraded GIS upon which they are planning to base the asset management system.
- Council let an Expression of Interest for the provision of an asset management system in May 2005.
- Council have developed a full business plan for the project and have set up an Asset Management Steering Committee to oversee the process.
- A specific team has been set up to undertake the project.

- Council expects that a tender for the provision of a system will be let in January 2006.
- Council have made an allocation under the proposed capital expenditure to implement the asset management system. The water and wastewater business' allocation of the total cost of implementing the system is based on the value of assets owned that would be captured into the system.
- Council have advised that the operation of the system, once implemented, would be transferred to the Council IT Department who would then charge the various council groups a service fee to use the system.
- Based on the Expression of Interest submissions, Council expects that the asset management system will cost between \$800,000 and \$1,000,000.
- The system is proposed to have full integration of asset information into the general ledger.
- The implementation costs (capital expenditure) are expected to be fully completed in the first quarter of 2008 with the agreed operational costs coming into effect. The implementation cost is expected to be over 50% of the total expected costs.
- Council has provided the Expression of Interest briefing documents that outline the proposed structure of the system and the various requirements for data capture, asset types, and functional requirements.

6 Summary Recommendations

6.1 *General*

This section provides a summary of our recommended total capital and operating expenditure for water, wastewater and stormwater, and operating expenditure for corporate activities related to water, wastewater and stormwater for Gosford City Council.

6.2 *Recommended Expenditure 2005/2006*

We have reviewed Gosford Council's 2005 AIR/SIR submission and its proposed capital and operating expenditure for 2005/2006 and have assessed whether the proposed expenditure is both prudent and efficient. We believe that some of the proposed expenditure is not prudent or efficient and have recommended some adjustments to the expenditure prior to incorporation into the regulatory asset base.

We recommend that the capital expenditure for 2005/06 as presented in **Table 6-1** is prudent and efficient and should be incorporated into the regulatory asset base.

*Table 6-1 Recommended Capital Expenditure for Gosford Council
– 2005/06*

Recommended Capital Expenditure Gosford Council (\$'000 2005/06)	2005/2006
Water	\$19,436
Wastewater	\$ 7,802
Stormwater	\$ 3,274
TOTAL	\$30,512

We recommend that the operating expenditure for 2005/06 as presented in **Table 6-2** is prudent and efficient and should be used as a base for the proposed operating expenditure.

**Table 6-2 Recommended Base Operating Expenditure for Gosford Council
 - 2005/06**

Recommended Capital Expenditure Gosford Council (\$'000 2005/06)	2005/2006
Corporate	\$ 9,216
Water	\$11,064
Wastewater	\$13,754
Stormwater	\$ 3,440
TOTAL	\$37,474

6.3

Recommended Expenditure 2006/2007 to 2008/2009

6.3.1

Capital Expenditure

We have reviewed Gosford Council's 2005 AIR/SIR submission and its proposed capital expenditure for the price path period, 2006/2007 to 2008/2009, and have assessed whether the proposed expenditure is efficient. We believe that some of the proposed expenditure is not efficient and have recommended some adjustments to the proposed expenditure.

We recommend that the capital expenditure for the period 2006/2007 to 2008/2009, as summarised in **Table 6-3**, is efficient and should be included in the pricing assessment.

**Table 6-3 Recommended Capital Expenditure for Gosford Council
 - 2006/2007 to 2008/2009**

Recommended Capital Expenditure Gosford Council (\$'000 2005/06)	2006/2007	2007/2008	2008/2009
Water	\$29,223	\$ 6,730	\$ 4,304
Wastewater	\$10,380	\$14,310	\$13,246
Stormwater	\$ 3,606	\$ 3,292	\$ 3,186
TOTAL	\$43,209	\$24,332	\$20,736

6.3.2

Operating Expenditure

We have reviewed Gosford Council's 2005 AIR/SIR submission and its proposed operating expenditure for the price path period, 2006/2007 to 2008/2009, and have assessed whether the proposed expenditure is efficient. We believe that some of the proposed expenditure is not efficient and have recommended some adjustments to the proposed expenditure.

We recommend that the operating expenditure for the period 2006/2007 to 2008/2009, as summarised in **Table 6-4**, is efficient and should be included in the pricing assessment.

*Table 6-4 Recommended Operating Expenditure for Gosford Council
- 2006/2007 to 2008/2009*

Recommended Operating Expenditure Gosford Council (\$'000 2005/06)	2006/2007	2007/2008	2008/2009
Corporate	\$ 8,905	\$ 8,599	\$ 8,295
Water	\$12,925	\$12,538	\$11,403
Wastewater	\$13,589	\$13,426	\$13,265
Stormwater	\$ 3,304	\$ 3,268	\$ 3,233
TOTAL	\$38,724	\$37,831	\$36,196

Appendix A Other Items Listing

PROJECT	2004 SUBMISSION	2005 SUBMISSION	DIFFERENCE	COMMENTS
SEWER				
CAPITAL				
KSTP-RENEW BELT PRESS FACILITY	1,000,000	900,000	-100,000	Revised estimate
GOSFORD CBD UPGRADE	800,000	1,210,713	410,713	Detailed DSP prepared resulting in more accurate description of works and corresponding estimates
GOSFORD CBD SEWER DSP	0	1,181,353	1,181,353	Detailed DSP prepared resulting in more accurate description of works and corresponding estimates
ASSET MANAGEMENT SYSTEM	275,000	375,000	100,000	Revised cost of Water & Sewer component of new AM system including data transfers from many data bases
GIS BACKLOG DATA CAPTURE	0	150,000	150,000	Capturing of backlog data now that the corporate GIS is at a functional level for Water & Sewer
UNALLOCATED PROJECTS	14,102,000	14,012,000	-90,000	Breakdown of costs to projects and revision of estimates. See unallocated page.
RECURRENT				
REFER TO HARD COPY TO BE MAILED				
WATER				
CAPITAL				
JWS MARDI HIGH LIFT PS	3,925,000	8,825,000	4,900,000	Please refer to information to be forwarded by Gary Casement and Ian Johnson.
JWS MARDI OUTLET STRUCTURE	4,143,000	9,500,000	5,357,000	Please refer to information to be forwarded by Gary Casement and Ian Johnson.
JWS LOWER WYONG/MARDI TRANSFER SYSTEM	2,678,000	2,900,000	222,000	Please refer to information to be forwarded by Gary Casement and Ian Johnson.
JWS MOONEY TRANSFER	2,012,000	645,000	-1,367,000	Please refer to information to be forwarded by Gary Casement and Ian Johnson.
JWS MARDI DAM RAISING	1,788,000	1,622,000	-166,000	Please refer to information to be forwarded by Gary Casement and Ian Johnson.
JWS MARDI POWER SUPPLY AUG	0	1,000,000	1,000,000	Please refer to information to be forwarded by Gary Casement and Ian Johnson.
JWS DESALINATION	24,250,000	350,000	-23,900,000	Please refer to information to be forwarded by Gary Casement and Ian Johnson.
JWS HUNTER CONNECTION	0	8,985,000	8,985,000	Please refer to information to be forwarded by Gary Casement and Ian Johnson.
JWS POTABLE GROUNDWATER	3,000,000	11,850,000	8,850,000	Please refer to information to be forwarded by Gary Casement and Ian Johnson.
JWS PROJECT MANAGEMENT	0	1,743,000	1,743,000	Please refer to information to be forwarded by Gary Casement and Ian Johnson.
ASSET MANAGEMENT SYSTEM	275,000	375,000	100,000	Revised cost of Water & Sewer component of new AM system including data transfers from many data bases
GIS BACKLOG DATA CAPTURE	0	150,000	150,000	Capturing of backlog data now that the corporate GIS is at a functional level for Water & Sewer
UNALLOCATED PROJECTS	6,876,000	4,574,185	-2,301,815	Breakdown of costs to projects and revision of estimates. See unallocated page.
RECURRENT				
REFER TO HARD COPY TO BE MAILED				

PROJECTED NEW WORKS/REPLACEMENTS UNALLOCATED

SEWER		2008	2009	2010
NEW WORKS	REPORTED IN THE 2004 SUBMISSION	668,000	1,281,000	853,000
REPLACEMENTS	REPORTED IN THE 2004 SUBMISSION	2,670,000	5,216,000	3,414,000
	TOTAL	3,338,000	6,497,000	4,267,000
	SPS & RETICULATION UPGRADES (EPA REQ)	450,000	450,000	470,000
	MINOR SPS REPLACEMENTS(MECH/ELEC)	801,676	2,333,412	2,100,071
	MINOR SPS REPLACEMENTS(CIVIL)	92,999	92,999	95,384
	MAJOR SPS REPLACEMENTS(MECH/ELEC)	426,578	386,848	179,832
	MAJOR SPS REPLACEMENTS(CIVIL)	17,475	17,475	17,923
	ODOUR CONTROL -SEWER	50,000	50,000	50,000
	UNALLOCATED KSTP/WWSTP MECH/ELEC	1,331,272	1,641,860	583,582
	SEWERAGE TREATMENT PLANT UPGRADES	0	731,000	303,000
	SEWER GRAVITY MAINS	0	653,406	437,208
	ASSET MANAGEMENT	50,000	50,000	30,000
	PRIORITY SEWER PROGRAM	118,000	0	0
	TOTAL	3,338,000	6,407,000	4,267,000
	DIFF	0	90,000	0

WATER		2008	2009	2010
NEW WORKS	REPORTED IN THE 2004 SUBMISSION	441,000	448,000	486,000
REPLACEMENTS	REPORTED IN THE 2004 SUBMISSION	1,763,000	1,792,000	1,946,000
	TOTAL	2,204,000	2,240,000	2,432,000
	WATER MAIN RENEWALS	284,683	372,310	528,405
	WATER TRUNK MAINS	164,093	164,093	164,093
	WATER RESERVOIRS	63,545	63,545	63,545
	WATER RESERVOIRS ROOF,LADDERS,INLET,PAINTING	597,632	611,561	638,138
	WATER TREATMENET CIVIL	22,072	22,072	34,543
	WATER PUMP STATIONS MAJOR (CIVIL GOSFORD)	5,081	5,081	19,275
	WATER PUMP STATIONS MAJOR (MECH/ELEC-GOSFORD)	144,730	119,888	80,800
	ASSET MANAGEMENT SYSTEM	50,000	50,000	30,000
	GOSFORD CBD RETICULATION UPGRADE	0	0	80,000
	WATER CONNECTIONS	0	50,000	50,000
	JWS MANGROVE CK DAM-UPGRADE FIRE TRAILS	0	0	50,000
	JWS DUBBO GULLY PLAN OF MANAGEMENT-IMPLEMENT	15,000	15,000	15,000
	TOTAL	1,346,836	1,473,550	1,753,799
	DIFF	857,164	766,450	678,201

Appendix B Capex Form

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